

Comment Letter R-I24

To: Cynthia Curtis, Environmental Planning Manager County of San Diego
Department of Public Works
5510 Overland Avenue, Suite 410, San Diego, CA 92123

From: Ray & Ellen Bender

Re: Bender Comments on County June 2018 Re-circulated Portions of McClellan-Palomar Airport Master Plan Programmatic EIR Due August 6, 2018

Date: Friday, August 3, 2018 Hand Delivered to County Environmental Division

Ms. Curtis

Enclosed are our comments on the county's June 2018 recirculation of portions of the county's McClellan-Palomar Master Plan Programmatic EIR.

Our comments, as well as those of the city of Carlsbad, explain why the county's June 2018 Recirculation is so defective that it must be rewritten and re-circulated.

The county's original recirculation confirms a complete misunderstanding of the GHG evaluation process, omits significant data, and misstates many alleged facts.

In addition, county failed to recirculate portions of the county's March 2018 PEIR that should have been re circulated. County's original and continuing analysis of water quality and air quality emissions, especially associated with construction in the 19 acre Palomar east end landfill.

Finally, the PEIR and PMP's discussion of the Palomar proposed massive west end retaining wall hides significant data showing that the wall is simply a subterfuge for Supervisor's horn to create an added 100-feet of land so that county in the future can extend the runway 900-feet rather than 800-feet.

Thank you for your further review of the issues.

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County of San Diego
ENVIRONMENTAL SERVICES

R-I24-1

To: County of San Diego Environmental Division c/o

Cynthia Curtis, Environmental Planning Manager County of San Diego
Department of Public Works
5510 Overland Avenue, Suite 410, San Diego, CA 92123

From: Ray & Ellen Bender

Re: Bender Comments on County June 2018 Recirculated Portions of McClellan-Palomar Airport Master Plan
Programmatic EIR Due August 6, 2018

Date: August 6, 2018 Hand Delivered to County Environmental Division

**Bender Comments on June 2018 County of San Diego Recirculated Portions of
County McClellan-Palomar Programmatic EIR**

- General Comments: **Proposed New NextGen Law.** County's Reader Guide to its June 2018 Recirculated PEIR materials says that readers may comment only on new issues, not old. However, CEQA requires the county to address new information available before county finalizes its EIR. Accordingly, we bring to your attention the June 2018 Amendment to Federal Administration Reauthorization Act of 2018 Proposed New Section [4119] related to nationwide airport compliance with certain NextGen satellite navigation measures. If adopted into law, the Amendment will affect the approach and glideslope of aircraft using Palomar and affect the airport's VNAP program. Address these issues in the Noise section of the Final PEIR, which County did not recirculate in June. See the attachment at the end of this table for a draft of the proposed law. Also, we incorporate by reference all comments of Carlsbad to county dated about July 31 to August 6, 2018.

Bender Recirculation Request (BRR) 1. Proper 20-Year Analysis Period. Confirm in the Final PMP and PEIR that the analysis period covered is 2016 to 2036 even though the county documents are finalized in 2018 because:

- The last county PMP and CEQA analysis [approved in 1997] analyzed environmental impacts ending in 2015.¹

¹ See all the Aviation Forecast Tables in Chapter Two ["Aviation Demand Forecast"] in the expired PMP.

- The PMP and PEIR county now processes repeatedly refer to analyzing environmental impacts through 2036, not 2038.
- Accordingly, (i) comply with CEQA, which requires analyzing environmental impacts through the PMP period specified, and (ii) comply with the government code planning and zoning provisions, which require a county plan be continuously in force without gaps.
- If county claims the new PMP and PEIR period is 2018 to 2038, explain why these documents reference an analysis period ending in 2036 rather than 2038 and update the missing analysis.
- Also, in the Final PEIR, explain what county general plan the county relies on when carrying out Palomar Airport projects from January 1, 2016 through December 31, 2018 given the Government Code constraints that county projects be consistent with the county's adopted General Plan.

R-I24-3
cont.

R-I24-4

#	Recirculated pages & sections	County Position	Bender Comment
1	2.2 Biological p. 2-17	County says: <i>"An addendum was added to the BTR in May 2018 to evaluate impacts associated with potential shifts in the FAA-Owned Medium-Intensity Approach Lighting System (MALSR)"</i>	<ul style="list-style-type: none"> • This PEIR change shows that county is in fact expanding Palomar Airport facilities outside its El Camino Real and Palomar Airport Road Northwest parcel by making available by a lease to the FAA additional areas for navigational lighting on the NORTHEAST corner of ECR and PAR. As set forth in County's PMP, county estimates it will pay \$8.6 million for these navigational improvements. More importantly, these improvements are needed only because county plans to extend its runway by 800-feet² and relocate the runway about 120 feet to the north thereby displacing various navigational aids currently on the northwest corner of El Camino Real and Palomar Airport Road. All navigational aids on the northeast corner of ECR and PAR are outside the Carlsbad Conditional Use Permit (CUP) 172 area.

R-I24-5

² As discussed later in these comments, county's comments about a future "800-foot" runway extension are misleading. County's so-called Palomar runway west end Engineered Materials Arresting System [EMAS] includes an unneeded \$13 million massive retaining wall to satisfy only Supervisor Horn.

		<p><i>navigational lighting structures on the Eastern Parcel (HELIX 2018).</i></p> <ul style="list-style-type: none"> For the above reasons, County has failed to meet CEQA EIR recirculation requirements because County failed to modify its project description to show the location, number, and intensity of lighting and other navigational aids to be installed so that a proper biological assessment could be made.³ In the Final PEIR, correct these omissions. BRR 2. County Undercounts of Biological Species Areas Affected by Navigational Lighting. As noted below, county suggests that the \$8.6 million of navigational improvements affects only 0.3 acres of land [13,068 square feet]. A 100-foot by 100-foot area is 10,000 square feet. It appears that county is substantially underestimating the area needed for the new navigational improvements and the impact area of high intensity lights on wildlife over an area many times greater than 13,068 square feet. In the Final PEIR, provide the following information: (1) the size of the area that the county is leasing to the FAA to place and maintain navigational aids on the northeast corner of ECR and PAR; (2) the number and kind of the navigational aids; (3) the square footage “footprint” that each navigational aid will require (including foundations) – which will show how much sensitive habitat and vegetation must be
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R-124-6

³ The county consultant Helix May 31, 2018 letter to Cynthia Curtis [CS-05.14] provides incomplete information regarding the Palomar Eastern Parcel navigational lights. The letter refers to a 20-foot wide by 1200-foot long maintenance access road (with apparently some laterals to each light standard). The letter notes a light standard occurs every 200 feet and that another standard may need to be added if the runway is extended 200 feet. The letter addresses relocating the runway north about 120 feet. The letter refers to a light standard base disturbance area of 10' by 10 feet. However, the letter does not address the 2018-2038 PMP proposal to extend the runway an added 600 feet. Nor does the letter provide any evidence that the FAA would keep the light standards in their existing location if the runway is lengthened by a total of 800 feet. Presumably, the FAA wishes to give pilots as early a warning as possible. After lengthening the runway, early warning is especially critical because aircraft will be touching down on the Palomar runway about 200-feet from hundreds of cars on the major arterial El Camino Real adjoining the airport – rather than touching down 1000-feet from such cars. Page 12 of the HELIX report entitled the REFERENCES that HELIX relied on to prepare its report does not refer to any FAA communication outlining the FAA proposed relocation site for the FAA navigational lights. The FAA might simply add more light standards to the east of the existing navigational aids. OR, if the FAA relocates all the standards to the north, the FAA might shift all of the light standards 800-feet or more. The precise plan is critical for two reasons. First, to calculate the sensitive area impacted by construction, the construction area must be known. Construction further east might impact more or fewer sensitive plants and animals. Second, the number of standards determines the square foot immediately impacted as well as the length of the maintenance road and the length of the laterals from the maintenance road to each standard. The missing HELIX report info precludes a reliable HELIX conclusions.

			<p>disturbed for each navigational aid; (4) the height of each navigational aid that includes a light source to guide aircraft to the runway; (5) the number of lights and candlepower of such lights on each navigational aid, the color of the lights, and whether the lights are constant or blinking [relevant to showing how much light will be created that could affect birds as reflected in FAA studies over the last 10 years]; (6) the total length and width of the maintenance roads (including laterals to access each light standard) which may impact protected vegetation and/or species; and (7) the risk of to aircraft of bird strikes caused by navigational lighting causing migratory and/or nesting birds to deviate from their normal flight paths.⁴ Also, identify what bird strike avoidance mechanisms will be installed at Palomar Airport to avoid bird strikes including but not limited to the (i) noise emitting devices and (ii) navigational lighting tower bird “dissuaders” depicted in the YouTube video noted in the footnote below. Explain the impact of these “dissuaders” on birds. When responding, please recall that the FAA Airport Facility Directory for Palomar [CRQ] expressly states in the airport remarks section: “<i>Extensive bird activity in vicinity especially in spring.</i>”</p> <ul style="list-style-type: none"> • BRR 3. County Failure to Discuss Impacts of Colored and/or Flashing Navigational Lighting. FAA studies show that airport navigational lighting of certain colors (red v. white v. green) and/or steadiness (fixed or flashing) impact wildlife adversely.⁵ In the Final PEIR, identify the specific FAA navigational lighting criteria 	<p>R-I24-6 cont.</p> <p>R-I24-7</p>
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⁴ For literature on the subject, see: (1) FAA Order 1050.1F Desk Reference in 13.1 et seq discusses Visual effects generally and specifically requires a discussion of such effects on biological resources; and (2) YouTube.com, “*Ranger Nick: Preventing Bird Strikes At World’s Busiest Airport.*”

⁵ See <https://www.theguardian.com/environment/2016/mar/24/airport-lights-birds-faa>, which states in part:

FAA aims to save millions of birds by changing static red airport lights

Federal Aviation Administration aims to stop millions of birds dying each year by changing static red lights, which attract birds, to flashing lights



▲ In addition to the millions of birds killed due to confusion from lights, about 13,000 a year are killed when they hit aircraft in flight. Photograph: Reuters/Alamy

In an attempt to save some of the millions of birds that die each year after being bewildered by airport illumination, changes will be made to the US lighting towers that warn approaching pilots.

The Federal Aviation Administration said it will change the lighting on towers across the US after its research found that birds are attracted to steady red lights that highlight obstructions to pilots at night. The FAA said its changes will save thousands of birds each year.

The research found that static red lights attract birds - often in large migratory flocks - which then circle the light repeatedly, often collapsing of exhaustion and dying on the ground. Some birds perish after hitting towers or surrounding wires.

It's thought that constant red lights disorientate birds far more than blue, white or flashing lights. A 2012 study estimated that 6.8 million birds a year die in the US and Canada due to this confusion - up to four times the amount that are killed by shooting.

The FAA conducted a trial in Michigan to compare different lights and found a large decrease in bird fatalities when flashing lights were deployed. The federal regulator has now instructed all new towers to be fitted with flashing lights, with operators of existing towers required to transition to the new system.

R-124-7
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			to minimize harm to birds and include a specific mitigation measure to assure navigational lights constructed and/or retrofitted will provide the needed protection. State whether Palomar today has any such distracting lights and identify the program that county will immediately implement to correct the problem.
2	2.2.1 Biological Resources Existing Condition s, p. 2-18	County refers to the Draft North County Multiple Species Conservation Program (NC MSCP) Plan and ties its analysis to the plan.	<ul style="list-style-type: none"> In 2009, County prepared a draft ordinance related to the NC MSCP. The draft provides in part: <p>SEC. 86.513. EXEMPTIONS</p> <p><i>The following projects are exempt from the provisions of this article and may receive Third Party Beneficiary (sic). A determination that the project is exempt must be made prior to impacts to</i></p> <p><i>DRAFT 6 February 2009</i></p> <p><i>North County Plan Appendix A Biological Mitigation Ordinance</i></p> <p><i>any species or natural vegetation. Projects are subject to the applicable provisions of section 86.514.</i></p> <p><i>(c) County facilities or public projects, determined to be essential by the County, including but not limited to a County Park or County Recreational facilities.</i></p> In addition p. 9 of the county consultant HELIX May 31, 2018 report on which county relies states in part: <i>"The proposed project is an essential public project that is exempt from the Resources Protection Ordinance (RPO) under Section 86.605(c)."</i> BRR 4. County Inadequate Description of County Mitigation Exemptions and Enforceable Mitigation Measures.

R-I24-7
cont.

R-I24-8

			<ul style="list-style-type: none"> ○ In the Final PEIR, state the present status of the above quoted draft ordinance and any similar final ordinance. ○ Also, in the Final PEIR, clarify what the county's reference to RPO § 86.605(c) means. It appears that county "takes away" with its right hand [the ordinance] what it purports to give with its left hand [the Palomar Airport PEIR biological description and proposed mitigation requirements]. <ul style="list-style-type: none"> ▪ Confirm in the Final PEIR that county irrevocably commits to the biological mitigation measures identified and will not claim under the noted draft ordinance or its successor or RPO 86.605(c) that Palomar Airport need not comply with the PEIR biological mitigation requirements. When answering this question, recall that the county promised to comply with Carlsbad MC § 23.53.015 and CUP 172 for many years but states in its current PEIR that it has no obligation to do so. • Explain in the Final PEIR when a county mitigation promise is binding? If county's position is that binding biological mitigation results only when a signed agreement exists between county and the wildlife agencies, then assure that such a binding agreement is attached to the PMP and PEIR for approval when the BOS acts on the PMP and PEIR. • BRR 5. County's Description of Biological Habitat Areas Affected is Inadequate. <ul style="list-style-type: none"> ○ The recirculated PEIR p. 2-18 project description and map of existing conditions is inadequate. It fails to identify how many acres of Airport land (i) comprise the northeast corner of ECR and PAR, (ii) how many of these acres contain protected vegetation and bird habitat, (iii) the estimated number of critters (a simple statistical sampling⁶ in different seasons gives an answer) impacted by
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R-I24-8
cont.

R-I24-9

⁶ Statistical sampling is a common method for estimating biological as well as habitat and crop productivity.

			<p>northeast corner development, and (iv) over how many acres the Palomar navigational aids will disperse light presently and in the future.⁷</p> <ul style="list-style-type: none"> ○ In the Final EIR, provide the noted information as well as a detailed map showing the areas.⁸ 	R-I24-9 cont.
3	2.2.1.1 Biological Resources Regula- tory Setting	County lists supposedly applicable federal, state, and local laws including the Carlsbad – Habitat Mgmt Plan	<ul style="list-style-type: none"> • BRR 6. County’s Meaningless References to Carlsbad Requirements. We are confused. <ul style="list-style-type: none"> ○ In it PMP and in discussions among county and Carlsbad staff and the community, the county has said that as a superior governmental entity, county need not comply with Carlsbad zoning and general plan conditions and related policies. ○ In the Final PEIR (i) state once and for all which (if any) Carlsbad zoning and planning laws and related policies county is and is not complying with and (ii) cite the official Board of Supervisor action supporting the county staff’s claim. Do not cite in your environmental documents laws that county does not intend to comply with. 	R-I24-10
4	2.2.1.4 Biological Resources Raptor Foraging, p. 2-24	The report states that the only raptor species observed on-site overhead was the red-tailed hawk.	<ul style="list-style-type: none"> • BRR 7. County’s Inadequate Documentation of Raptor Species. In the Final PEIR, state how many hours during 2017, qualified biologists observed the Palomar Airport northeast parcel bordering ECR and PAR and during what season and the months that raptor species are expected in the area? In short, how reliable was the reporting? • BRR 8. County Inadequate Documentation of Impact of Navigational Lighting on Raptor Species. Where are the county-referenced minimum 5 acres of possible raptor habitat located with relationship to the existing FAA navigational lighting aids and with 	R-I24-11

⁷ Like noise, light attenuates with distance. We understand that a description of the distance the light from the light towers travels may require an assumption of a certain number of lumens (or other light measurement). When answering, state the number of lumens selected and the reason for the selection.

⁸ County refers to Figure 2.2-1 of the Draft NC MSCP Plan as depicting certain areas. Despite a 10-minute computer search, we were unable to find this Figure. PEIR readers should not have to undertake a “treasure hunt” to find the documents county relies on.

			relationship to the proposed FAA navigational lighting aids? Provide a map and state the distance of such acreage from the lighting fixtures and explain why the lighting will not interfere with them, taking into account the FAA light study referenced in Item 1 above and in footnote 5.	
5	2.2.1.7 Biological Resources Indirect Impacts: Lighting, pp. 2-26 to 2-27	County states: <i>“Night lighting that extends from a developed area onto adjacent wildlife habitat can discourage nocturnal wildlife . . . resulting in alteration of natural behavior, and can provide nocturnal predators with an unnatural advantage over their prey, resulting in a potentially significant impact. The ... active airfield [is surrounded by ... chain link fence . . . for security and wildlife exclusion...”</i>	<ul style="list-style-type: none"> • BRR 9. County Failure to Address Impact of Navigational Lighting on Species When Predator Fences Missing. <ul style="list-style-type: none"> ○ County does NOT state that the Palomar Airport NORTHEAST parcel east of ECR is bounded by a fence. Nor did we see a fence when driving past this parcel. ○ Since county concedes that the absence of a fence in added light conditions favors predators over prey, adding and moving lighting enlarges the impacted area and hence creates a significant impact. ○ In the Final EIR, address this issue. List the number and location of lighting before and after an 800-foot long runway extension and the “light enhanced” area before and after the navigational lighting improvements. Recall the FAA Order 1050.1F requires substantial details. 	<p>R-I24-11 cont.</p> <p>R-I24-12</p>

6	2.2.5 Biological Mitigation Measures, pp. 2-36 to 2-40	County admits its PMP significant project impacts include impacts to gnatcatcher habitat, coastal sage scrub, vernal pool habitat, granitic chamise chaparral, migratory birds, southern maritime chaparral, and non-native grassland.	<ul style="list-style-type: none"> • BRR 10. County's Inadequate Description of Palomar Project Impact on Biological Species/Habitat and of Enforceable Mitigation Measures. <ul style="list-style-type: none"> ○ The County 1997 BOS-adopted McClellan-Palomar Airport Master Plan in Appendix C in Section 7, entitled Biological Resources, says in part: "<i>A biological resources report was not prepared for this initial study; therefore, project specific biological surveys would be required for all development occurring within the remaining areas containing native vegetation ... prior to the issuance of grading permits.</i>" ○ Since county failed to prepare an EIR in 1997 when county prepared its last 20-year PMP and promised to do project specific biological surveys, provide in the Final PEIR the following information: (i) a list of all grading and construction projects carried out on the Airport NORTHEAST parcel of ECR and PAR from 1997 to 2017 including but not limited to the installation of existing Palomar navigational lighting and (ii) a list of the biological surveys that were undertaken before each such project. ○ Especially provide in the Final PEIR the biological surveys that county performed when it extended the Palomar Runway from 4700 feet to 4900 feet and rerouted the service road at runway end. ○ This information is relevant to the enforceability of mitigation measures that county has committed to in the past as well as to the enforceability of mitigation measures county is committing to in the new PEIR and the sufficiency of the enforceability language in the new PEIR. Absent the requested information, the public can not tell whether county is adopting enforceable mitigation measures in its PMP and environmental documents. • BRR 11. County Inaccurate Habitat Calculation for 800-Foot v. 900-foot runway (the Massive West Runway End Retaining Wall). <ul style="list-style-type: none"> ○ County has acknowledged sensitive habitat in the northwest portion of the active Airport parcel. County has calculated habitat impacted based on the county
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R-I24-13

R-I24-14

			<p>PMP projects to be undertaken. County may, or may not, have accurately calculated the impacted acreage for the following reason.</p> <ul style="list-style-type: none"> ○ The PEIR refers to a runway extension up to 800 feet long. However, the PEIR – in response to the request of Supervisor HORN, the supervisor for the Palomar Airport area – proposes a 900-foot alternative. ○ The extra 100 feet would be achieved by installing a massive Palomar Airport west runway end retaining wall. Such a wall would remove massive amounts of existing vegetation and animal habitat. ○ In the Final EIR, provide a map showing (i) where the sensitive vegetation was located for each alternative [that is, with and without the retaining wall and extra approximately 100 feet added]; (ii) how much of the sensitive habitat would be impacted by installing and/or omitting the retaining wall; (iii) the significance of the impact created on sensitive areas and/or wildlife; and (iv) the mitigation for significant impacts. 	R-I24-14 cont.
			<ul style="list-style-type: none"> • BRR 12. County Preservation of Sensitive Habitat Does not Satisfy Mitigation Requirements. County refers to mitigating the loss of sensitive areas by preserving other areas not impacted. We understand the law to say that governmental entities have the obligation to preserve existing wildlife sensitive habitats. In the Final EIR, explain (i) how preserving a habitat that county already has the legal obligation to maintain can mitigate for the loss of habitat altered by county PMP projects and (ii) cite the relevant law and regulations that recognizes such preservation as appropriate mitigation for habitat destruction. 	R-I24-15
			<ul style="list-style-type: none"> • BRR 13. County's Assessment on Biological Project Impacts is Inadequate for the Airport Northeast Parcel. For the reasons set forth in footnote 3 in Item 1 above, the county consultant HELIX report does not reliably assess the PMP required navigational aids on the Palomar Airport EASTERN parcel. In the Final PEIR provide all the relevant information requested in footnote 3 and provide the name and contact info for the FAA person who has confirmed where the EASTERN parcel navigational aids would have to be located if the runway were extended 800 feet and/or extended 900-feet 	R-I24-16

			and/or relocated 120 feet northward.
7	§ 3.1.5 Green- house Gas (GHG) Title Page	<p>The title page says the new info includes the GHG Analysis Memo of County of June 2018.</p> <p>The title page also says “The original Climate Change</p>	<ul style="list-style-type: none"> • BRR 14: County staff’s GHG discussion is largely unintelligible. <ul style="list-style-type: none"> ○ Even if county’s alleged facts, assumptions, and formulas could be parsed, they tell no simple story. It is impossible to figure out how airport-related GHG, small or large, are counted into an overall GHG reduction program. ○ Even if county had no legal obligation to mitigate GHG emissions [doubtful since county chooses to operate Palomar, not just build it, and lengthen the runway, which will attract a larger mix of larger more fuel laden aircraft], county still has the CEQA obligation to disclose the extent that ALL Palomar aircraft operations will have on GHG emissions. ○ In the Final EIR, include a simple table showing (i) what total Palomar operational GHG emissions from all aircraft and associated support equipment are today and will be in 2036; (ii) what total GHG emissions are today and will be from all vehicles associated with Palomar operations [including users of all aircraft and of all vendors supplying Palomar, such as the fuel trucks]; (iii) what total GHG emissions are today and will be from all PMP project construction including the GHG released from the three Palomar landfills if several hundred pilings are placed 30 to 50 feet into the ground; and (iv) why it is NOT feasible for county to offset the increase in GHG by purchasing GHG credits from companies reducing their emissions. Explain how county is meeting Governor Brown’s state-adopted GHG emission goals if county is ignoring GHG emissions related to aircraft it invites to its expanded Palomar Airport. ○ If any Board of Supervisor member understands county’s alleged GHG analysis, dinner at a nice restaurant on us. We’ll pick up the Emperor’s Clothes on the way. • BRR 15. Readers Cannot Assess What County’s “Reference/non-Reference” to its Original GHG Technical Report Means. In the Final PEIR, explain what the bolded language to the left means. The PEIR that county circulated in March 2018 refers to a “Draft Climate Change Technical Report for the MP Master Plan Update of

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R-I24-16
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R-I24-17

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R-I24-18

		Technical Report is available on the Master Plan website for info purposes but is not the subject of this recirculation.” (Emphasis added.)	<p><i>DECEMBER 2017.”</i> How much of the December 2017 report remains intact and is to be relied on and how much is replaced by the June 2018 report? How does the public lay reader know?</p> <ul style="list-style-type: none"> • BRR 16. County’s GHG “Significance Threshold” Discussion is Unintelligible. County’s table entitled <i>Recirculation Reader’s Guide</i> at page 2 of its June CEQA recirculation [§ 3.1.5 GHG] states in part: <i>DPEIR Section 3.1.5 was also revised to ... discuss a revised significance threshold.</i> <ul style="list-style-type: none"> ○ Explain in the Final PEIR whether the original December 2017 GHG analysis remains valid or are parts of it (including the significance thresholds) replaced? ○ County’s confusing statement is not a mere technical error. It is the difference to a lay reader spending 3 hours or 6 hours to attempt to understand an extremely technical subject, which not even the county understands as explained below. ○ Explain in the Final PEIR what pages of the county December 2017 circulated GHG facts and analysis remain valid and which have been replaced so a reviewing court knows what county is in fact saying. 	R-I24-18 cont.
8	§ 3.1.5 GHG Emissions	County states: <i>“The information in this section considers potential impacts as a result of GHG emissions due to the Proposed Project.</i>	Presumably, the county GHG analysis has four goals. First, establish the existing “Project” GHG emission levels. Second, establish how much the PMP projects change these levels. Third, determine if increased emissions exceed GHG levels of significance. Fourth, if so, implement mitigation measures. Determining emission levels requires county to find and assess all construction and operational GHG emissions. County’s GHG methodology is fundamentally flawed for several reasons. We explain many defects in these introductory comments and questions so the flaws can be seen comprehensively.	R-I24-19

		<p>BRR 17. Flawed “Project” Scope #1 Error: Piecemeal Analysis.⁹</p> <ul style="list-style-type: none"> • County controls 8 county of San Diego Airports. Often aircraft fly from one county airport to another, as when training flights and recreational flights leave Gillespie and fly to Palomar and other airports. As county notes in its GHG presentation, GHG analysis is fundamentally a “cumulative” analysis. • But county engages in its familiar CEQA “project splitting” by assessing its 8 airports individually. Individual assessment may be appropriate for individual airport construction impacts but not for operational impacts. • Cumulatively, the 8 county airport operations may exceed applicable threshold GHG levels (or the alternative violation of policy criteria) and hence trigger mitigation requirements. But county avoids the trigger by assessing each airport individually. • That approach fundamentally avoids mitigating for the GHG emissions the 8 county airports cumulatively cause. In this way, county, and the Cal Trans Division of Aeronautics, frustrate the GHG laws enacted under Governor Brown. • To confirm this conclusion, simply look at county’s recirculated GHG mitigation measures at pages 3-79 to 3-80, which have nothing to do with aircraft operations. This factor should be taken into account when county applies for State airport-related grants. • In the Final PEIR, discuss the issues raised in this paragraph and provide the cumulative annual GHG emissions from aircraft and vehicles using the 8 county airports. <p>BRR 18. Flawed Project Scope #2 Error: Airport-Traffic Undercounts Tied to County’s “Air Carrier” Analysis Only.</p>	<p>R-I24-20</p> <p>R-I24-21</p>
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⁹ County discussion of air quality impacts separately at its 8 airports might be appropriate because air quality and significance levels may vary among the airports. However, as county concedes, GHG discussion is conceded to be a “cumulative” analysis. That means that every GHG addition no matter where hastens the Global Warming impacts that California state law seeks to avoid. Hence, county must treat GHG emission analysis differently than air quality emission impacts generally.

			<ul style="list-style-type: none"> County says it assessed the GHG emissions associated with vehicles Palomar passengers use. County says it based these counts on its passenger forecasts of PAL 1 and PAL 2. But PAL 1 and PAL 2 include only passengers on “commercial air carriers.” In 2016, Palomar had about 150,000 annual operations. Of those, less than 5,000 operations involved regularly scheduled commercial carriers. Omitted from PAL 1 and PAL 2 are all private aircraft pilots and their passengers, all corporate pilots and their passengers, all chartered flight pilots and their passengers, and all helicopter pilots and their passengers.¹⁰ In other words, county Palomar traffic GHG calculations ignore about 140,000 annual operations, which carry on average 1 to 6 airport users who must travel to and from the airport. If for example, on average, the foregoing annual operations shuttled 3 people, then county has ignored 3 x 140,000 annual airport users = 420,000 users. Two trips for each user equates to an ignored 840,000 annual trips. In the Final PEIR, (i) explain why these users have been omitted, (2) explain what measures county will put in place to count the many “hidden users” (for example the number of passengers shuttled by corporate aircraft), and (3) provide the recalculated numbers and analysis. 	R-I24-21 cont.
	§3.1.5.1 GHG Existing Condition s	County notes that under the ACRP 11 ¹¹ analysis, so-called Scope 3 emission sources “ <i>are not primarily under the County’s ownership or</i> ”	<p>County’s statement errs for three reasons.</p> <ul style="list-style-type: none"> BRR 19. Reason 1: Field of Dreams: Build It and They Will Come. <ul style="list-style-type: none"> As the FAA repeatedly says – usually in the context of noise – if a community does not want more aircraft impacts, do not build airports capable of handling more and/or larger aircraft. Two things are equally true. If county’s PMP accepts the No-Build alternative, air traffic will incrementally 	R-I24-22

¹⁰ Recall that the discussion in this paragraph focuses on Palomar Airport.

¹¹ ACRP Report 11 – FAA Airport Cooperative Research Program “*Guidebook on Preparing Airport Greenhouse Gas Emissions Inventories.*”

		<p><i>direct control” and County has no authority to regulate aircraft or their emissions, and there is no applicable methodology or threshold with which to evaluate [their] significance ... ”</i></p>	<p>increase at Palomar, especially since Palomar has existing excess capacity as shown by its historical use.</p> <ul style="list-style-type: none"> ○ But equally true, if county extends the Palomar runway, more larger aircraft will also use Palomar and eventually, larger aircraft will displace the smaller general aircraft – as Supervisor Horn said in his December 2015 statement in the Board of Supervisor open session when the Palomar Airport Runway Feasibility Study was considered. For a transcript of Supervisor Horn’s statement, see Attachment A to these comments, incorporated by reference. ○ County’s PMP and PEIR – apparently tongue in cheek – say that it is not the county’s intent to attract more aircraft to Palomar by extending the runway, a statement that flies in the face of what happens every time a runway is extended. ○ County’s past Palomar improvements also contradict county’s stated intent. County built a 150 foot wide allegedly B-II runway when FAA requirements only called for a 75-foot to 100-foot width, thereby enticing larger C and D size aircraft (having wider wings and therefore needing more separation between aircraft using the runway and taxiway concurrently) to use Palomar Airport. Similarly, county in the 2000s increased the runway length from 4700 feet to 4900 feet and increased the runway surface wheel loading capacity to attract larger aircraft. ○ In the Final PEIR discussion of GHG emissions – especially in the discussion of which alternatives comply with the county’s 8 selection criteria – explain why extending the runway to serve more, larger aircraft carrying significantly more fuel [2,000 to 4,000 gallons for C and D aircraft rather than 150 gallons for FAA-rated A aircraft] furthers California’s GHG intent and goals. Also explain how county concludes that it need not reduce GHG emissions attributable to aircraft when (i) it is county that increases the GHG emissions by undertaking its PMP improvements thereby attracting more larger, fuel laden aircraft to Palomar and (ii) it is within county’s power to undertake various non-aircraft GHG mitigation measures that could offset aircraft GHG emissions.
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R-I24-22
cont.

			<ul style="list-style-type: none"> • BRR 20. Reason 2: Regulation of Palomar Airport Runway Use Intervals. <ul style="list-style-type: none"> ○ The Airline Deregulation Act of 1978 preserved the county's rights to impose proprietary restrictions on use of its airports.¹² ○ In addition, the Clean Air Act – which has always recognized the right of California to enact more stringent air quality regulations – includes regulation of GHG.¹³ ○ Hence, ample authority exists to support county actions to reduce GHG aircraft emissions at county airports by restricting runway interval use.
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R-I24-23

¹² See the Airline Deregulation Act of 1978:

"FEDERAL PREEMPTION

49 u s e 1305. " S E C . 105.

(a)(1) Except as provided in paragraph (2) of this subsection, no State or political subdivision thereof and no interstate agency or other political agency of two or more States shall enact or enforce any law, rule, regulation, standard, or other provision having the force and effect of law relating to rates, routes, or services of any 49 u s e 1371 air carrier having authority under title I V of this Act to provide inter-state air transportation.

"PROPRIETARY POWERS AND RIGHTS

(b) (1) Nothing in subsection (a) of this section shall be construed to limit the authority of any State or political subdivision thereof or any interstate agency or other political agency of two or more States as the owner or operator of an airport served by any air carrier certificated by the Board to exercise its proprietary powers and rights.

¹³ See https://en.wikipedia.org/wiki/Regulation_of_greenhouse_gases_under_the_Clean_Air_Act which provides

"The United States Environmental Protection Agency (EPA) began regulating greenhouse gases (s) under the Clean Air Act ("CAA" or "Act") from mobile and stationary sources of air pollution for the first time on January 2, 2011. Standards for mobile sources have been established pursuant to Section 202 of the CAA, and GHGs from stationary sources are currently controlled under the authority of Part C of Title I of the Act. The basis for regulations was upheld in the United States Court of Appeals for the District of Columbia in June 2012. Court Backs E.P.A. Over Emissions Limits Intended to Reduce Global Warming June 26, 2012 D.C. appeals court upholds EPA regulations to fight global warming by Darryl Fears, June 26, 2012.

			<ul style="list-style-type: none"> ○ One way to reduce emissions is to reduce the interval times between aircraft taking off from Palomar. Increasing interval times means that aircraft taxing time will be reduced, thereby reducing GHG (and other air quality) emissions. ○ Increasing interval times also has a secondary benefit. County reports that the FAA tower sometimes orders aircraft taking off to deviate from the Palomar Voluntary Noise Abatement Plan (VNAP) flight paths. Deviation is ordered to make room for “following” aircraft. If the following aircraft take off a minute or two later, the FAA tower would have no need to direct the leading aircraft off the VNAP preferred route. ○ In the Final PEIR, discuss the issues in this paragraph. Specifically: <ol style="list-style-type: none"> (1) Discuss whether county has considered altering runway interval takeoff times as a mitigation measure; (2) If not, explain why not; (3) If so, provide the contact information for the people at the FAA and Cal Trans Division of Aeronautics that county discussed the issues with so that we may follow up on such discussions. (4) Explain why the suggested increased Palomar runway interval times would not reduce GHG emissions – if that is the county position. • BRR 21. Reason 3: Aircraft GHG Restrictions Available to County. <ul style="list-style-type: none"> ○ County states, in essence, that there is no value to evaluating aircraft GHG emissions because there is no methodology or threshold standards that the acquired data could be used for. ○ County ignores that fact that the international treaties, federal, and state law say in essence that any addition to GHG is harmful and should be curtailed. In other words – unlike the standard CEQA air quality analysis, which follows the threshold approach, county cannot say that aircraft GHG emissions are harmless until they reach a certain level. ○ Accordingly, in the Final PEIR, identify GHG mitigation measures that would be helpful at Palomar Airport, even if county contends the measures would have
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R-I24-23
cont.

R-I24-24

			to be imposed by the FAA or other agency. Otherwise, it is clear that county is simply “going through the motions” to satisfy a technical GHG technical requirement only, as opposed to trying to solve a GHG problem.	R-I24-24 cont.
10	§ 3.1.5.1 Existing Condi- tions, p. 3- 56	County says no available methods exist to analyze airport GHG emissions, especially since CEQ guidelines have been withdrawn.	<ul style="list-style-type: none"> • BRR 20. GHG Analysis Methodology. We hear county’s concern. But oddly, county does not explain how Los Angeles International Airport, or John Wayne Airport, or San Diego International Airport have analyzed GHGs in their EIRS. In the Final PEIR, <ul style="list-style-type: none"> ○ Explain what approaches other busy airports have taken to analyzing GHG emissions and why that approach does not work for the 8 county airports. ○ Explain how county ignoring the GHG emissions from its 8 county airports, Palomar especially, will contribute to State and local agencies meeting the state-imposed deadlines to reduce GHG emissions. Is the county simply saying it can ignore all aircraft emissions from aircraft attracted to the airports county designed, built, and operates? 	R-I24-25
11	§ 3.1.5.1, California Global Warming Solutions Act of 2006, p. 3- 56	County says: “ <i>California Executive Order B-30-15 signed in April 2015, added an intermediate GHG emissions reduction target. This target is set as the reduction of GHG emissions to 40 percent below 1990 levels by 2030.</i> ”	<ul style="list-style-type: none"> • BRR 21. GHG Analysis: The California B-30-15 Executive Order. <ul style="list-style-type: none"> ○ In the Final PEIR, explain how county interprets the Executive Order it quotes. ○ The EO is subject to abuse for the following reason. <ul style="list-style-type: none"> ▪ Assume that (i) in 1990, Palomar handled 250,000 aircraft and (ii) handles 200,000 aircraft (close to the county projection) in 2030. ▪ The question is: For purposes of determining the 2030 40% GHG reduction target, how does county determine its 1990 Palomar baseline GHG level? ▪ Should the baseline be 40% of the GHG for 250,000 aircraft actually handled in 1990 [what the words seemingly mean] or 40% of the GHG level for 200,000, the number of aircraft handled in both 1990 and 2030 [an interpretation more consistent with the intent of reducing GHG? In other words, looking at the intent to reduce GHG over time, the quoted EO makes sense when aircraft operations increase over time, but not 	R-I24-26

			necessarily if they decrease over time. Without the foregoing information, it is impossible to determine what the county's mitigation intent is when GHG thresholds are exceeded.	R-I24-26 cont.
12	§ 3.1.5.1, California Cap & Trade Program, p. 3-57	<ul style="list-style-type: none"> County notes that the California Air Resources Board (CARB) is working on a "Cap and Trade" program. 	<ul style="list-style-type: none"> BRR 22. County Ignores Its Ability to Mitigate Palomar GHG Emissions Through CARB's "Cap & Trade" Program. <ul style="list-style-type: none"> County does not explain what mitigation obligations county might have under a Cap and Trade program. We understand the Cap and Trade concept to be that when an entity owns and operates a facility which creates GHG, the entity may need to assure that at a different location GHG emissions are reduced in some way including by purchasing GHG credits available in the market resulting from certain facilities either closing or operating more efficiently. If county does not extend the runway and attract more aircraft, presumably California cap and trade requirements should apply only to aircraft operators. However, if county expands the airport thereby increasing airport capacity and GHG emissions beyond the "natural growth" of the airport, then county should be responsible for implementing "cap and trade" mitigation measures. In the Final PEIR, discuss the county's position on the issues raised in BRR 22. If the county position is that it has no "cap and trade" obligation, explain why not when county airport expansion leads to airport growth and increased GHG emissions. Recall that CEQA requires county to discuss all feasible mitigation measures. 	R-I24-27
13	§ 3.1.5.1, County of SD Climate Action Plan, p. 3-	County says: <i>"The County 2011 General Plan cites goals and policies pertaining to all County-owned"</i>	<ul style="list-style-type: none"> BRR 23. County Recognizes that Its PMP GHG Obligations are Inconsistent with Its County General Plan and Hence County Has Not Met County's Government Code Requirements. <ul style="list-style-type: none"> In essence, county concedes what we extensively noted in our March 2018 PEIR comments. By (i) adopting a 2011 County General Plan applicable only to 	R-I24-28

60	<i>airports including McClellan-Palomar Airport which is a County-owned facility. However, because the airport is located within the City of Carlsbad, the airport does not have a County-designated zone or land use to compare against the assumed designations used in the CAP. Because the CAP and the County GHG Guidelines are based upon the land use assumptions of the 2011 General Plan, the fact that the Airport Master Plan improvements</i>	<p>unincorporated areas of the county, (ii) then asking Carlsbad to apply Carlsbad zoning and planning to Palomar Airport and accepting such planning and zoning, and (iii) then in its March 2018 PMP and PEIR attempting to disavow the application of Carlsbad planning and zoning, county has created a real mess. County's June 2018 Revised Draft PEIR Section 3.1.5 Greenhouse Gas Emissions Recirculation only deepens the morass. Questions that come to mind include the following:</p> <ul style="list-style-type: none"> ▪ Carlsbad and County GHG Counting Methodology. In its 2015 Carlsbad General Plan, Carlsbad calculated GHG emissions from Carlsbad traffic including those along El Camino Real and Palomar Airport Road. In part, the vehicle traffic GHG emissions derive from actual Carlsbad traffic studies showing how busy these roads are. Of necessity, the traffic GHG emission levels included traffic derived from Palomar users. Based on these numbers, Carlsbad calculated its State of California GHG mitigation obligations.¹⁴ If these obligations are county, not Carlsbad, obligations, then the county should correct the mess it has created. The way to do that is: <ul style="list-style-type: none"> • For the Board of Supervisors to confirm – if the BOS agrees with the position county staff stated in its PMP and PEIR – that county no longer wishes to comply with Carlsbad zoning and planning restrictions and policies. • For the Board of Supervisors (following all the Government Code procedures) to amend its 2011 County General Plan to precisely state what county obligations apply at Palomar Airport and at Gillespie Airport, the two county airports within charter city areas. • For county and Carlsbad staff to then coordinate their GHG
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R-124-28
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¹⁴ We are aware that Carlsbad apparently says that it did not consider Palomar aircraft operational levels directly, not surprising since Carlsbad in 2015 had no idea of the county PAL 1 and PAL 2 forecasts.

		<i>were not include in the 2011 General Plan means that the CAP cannot be used to streamline the review of GHG emission from the Proposed Project."</i>	<p>analysis and mitigation efforts to assure an appropriate allocation of responsibility between the two entities.</p> <ul style="list-style-type: none"> ○ CAP Issues: As noted above, county and Carlsbad will then have to adjust their CAP and trade obligations if other mitigation measures do not sufficiently address GHG issues. ○ In county's Final PEIR respond to the preceding issues. Include a citation from the 2011 County General Plan to support county's contention that County GP requirements apply to Palomar given the fact that the County General Plan states it applies only to county facilities in unincorporated areas of the county. ○ If county still maintains that all 2011 County General Plan policies apply to Palomar Airport, then explain in the Final PEIR why county failed to discuss these policies including all the policies that we outlined at pages 1 to 21 of our Part A, March 2018 comments on the county PMP and PEIR so that the county position is clear for court review. 	R-I24-28 cont.
14	§3.1.5.2 Project Specific Service Population p. 3-66	At p. 3-58, county says: "[T]he [California Air Resources Board] 2017 Scoping Plan Update includes a statement regarding GHG emission evaluation under CEQA, "[l]ead agencies have the discretion to develop evidence-based numeric	<ul style="list-style-type: none"> • BRR 24. County's GHG Methodology Does Not Meet CARB's "Evidence-Based" requirement. <ul style="list-style-type: none"> ○ In a nutshell, county says that Palomar could serve as many as 1,311,539 residents today (out of a total 2014 SD population of 3.2 million) and 1,552,067 in 2036. ○ Using the latter figure, county then divides estimated 2036 Palomar GHG-related emissions by the latter population figure; County concludes (apparently) that each potential Palomar user thus contributes 0.026 to 0.035 metric tons of GHG to the environment in 2036. [p. 3-69]. ○ Along the way, county suggests that the per person GHG metric ton limit is 3.01. [p. 3-69]. Stated simply, if you use Palomar Airport in 2036, you will use 0.0086 of your GHG allotment. A negligible amount. So why worry. ○ Consider just a few reasons why the foregoing methodology makes no sense: 	R-I24-29

		<p><i>thresholds (mass emissions, per capita, or per service population [SP]) consistent with this Scoping Plan, the State's long-term GHG goals, and climate change science." However, unlike the assessment of community area plans, no specific method was provided by CARB on how to develop a SP threshold for an individual project." Then at p. 3-68 county proposes an "SP" (Scoping Plan/Service Population) based on San Diego population numbers.</i></p>	<ul style="list-style-type: none"> ▪ Arbitrary Data. To plug numbers into its GHG formula, county could have used at least three different numbers: total people in SD county, the "made-up" number county did use tracking people who "mighta, coulda, woulda" used Palomar, or the actual projected PAL 1 and PAL 2 estimated passenger usage numbers (304,673 and 575,000 respectively). The most logical choice would be the last. Tie GHG use to the people using it. But none of these approaches have true merit. ▪ Unhelpful Data. Truth be told, county is grinding out meaningless numbers. Seemingly, those numbers are irrelevant if the per person Palomar GHG emissions are negligible. However Governor Brown and the climate experts say that several U.S. coastal cities including some in California will be under water within 15 to 20 years. County's data provides little helpful information to mitigate the state-predicted impending disaster. ▪ The Fundamental County Methodology Flaw. As noted in the CARB column 3 quoted to the left, county's task is to develop an "evidence-based" GHG emissions number to help the state meet its GHG emission reduction goals. Although California has a minute share of world population and land area¹⁵, California has decided that its GHG reduction program will help avert Climate Change. County's adopted methodology presume minute airport GHG emissions are insignificant. This approach contradicts the basic policy decision that the state has already made in Sacramento: namely, minute California GHG reductions [when compared to world GHG emissions] will make a difference. By
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R-124-29
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¹⁵ California has about 1/4 of 1 percent of the world population [about 40 million people of 7.6 billion people] and 164,000 square miles of 57,500,00 square miles or .002 percent of the global land area. Moreover, actual California land area contributing to Climate Change is significantly less than the 164,000 California square miles because perhaps 90% of California's population lies within 50 miles of the coast.

			<p>definition, minute California GHG reductions aggregate both major and minor reductions at the local level.</p> <ul style="list-style-type: none"> ▪ The Solution: For reasons noted above, county's GHG program should focus on (i) total GHG emissions from all 8 county airports, not individual airports and (2) procedural changes that reduce airport-related GHG emissions. These emissions should then be compared to the overall California estimated GHG annual emissions. As a practical matter, it is unlikely that California can meet its GHG goals unless "across the board" GHG reduction measures are adopted for all businesses and governmental facilities in California, especially given the short time frame available to produce meaningful results. ▪ Contrast what county tries to do in its GHG analysis with what the air quality agencies do to reduce Clean Air Act (CAA) pollutants generally. ▪ Take just one example. Rather than calculating (i) how often property owners paint their houses and (ii) how big the houses are and (iii) therefore how much each property owner painting a building will contribute to CAA pollutants, CARB simply undertook a program to reduce volatile organic compounds (VOCs) and other pollutants from industrial "coatings" (paints and other materials). The "count the houses and allocate quotas" would be a worthless approach. Just as the county attempt to allocate quotas to individual persons using aircraft is worthless. CARB's "adopt uniform measures to reduce pollutants" is the demonstrated successful approach. ▪ As noted above, one procedure county could adopt to reduce aircraft emissions from aircraft idling needlessly on the Palomar runway is to increase the interval time between aircraft taking off. Limiting the number of "touch and go" flights might be another operational measure
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R-I24-30

			<p>that could be adopted. Perhaps aircraft “simulator” training (sponsored with FAA funds) could substantially reduce the need for actual flights.</p> <ul style="list-style-type: none"> ○ In the Final PEIR, discuss the issues above. Explain why the adopted county methodology is not arbitrary. Explain how dividing county wide emissions at the 8 county airports into allegedly “insignificant” emissions helps achieve the state’s goal of reducing GHG. Explain why the county cannot reduce Palomar take-off times to improve both GHG reductions and VNAP noise compliance. 	<p>R-I24-30 cont.</p> <p>R-I24-31</p>
15	§ 3.1.5.2.1 Project-Generated GHG Emissions pp. 3-66 to 3-70.	County says it calculated all relevant GHG emissions.	<ul style="list-style-type: none"> • BRR 25. County’s GHG construction emission calculations for on-site construction equipment are incomplete and/or internally inconsistent for the following reasons. <ul style="list-style-type: none"> ○ County says it follows the FAA ACRP 11 requirements. ACRIP defines construction emissions as <i>from mobile equipment</i>. <ul style="list-style-type: none"> ▪ Inconsistent Reporting of EMAS Carbon Dioxide Emissions. County Recirculated Table 3.1.5 -3 entitled “<i>Total Construction GHG Emissions</i>” respectively lists for PMP Items 4 (Palomar runway west end EMAS) and 15 (Palomar runway east end EMAS) carbon dioxide emissions of 1684 metric tons and 16 metric tons.¹⁶ ▪ The West End EMAS and EAST End EMAS are essentially identical. Each EMAS is designed to handle the exact same aircraft, the only difference being whether aircraft head east or west. ▪ Yet, County’s GHG emissions for the west end EMAS are 100+ times greater than the CHG emissions for the east end. ▪ Explain in the Final PEIR how the PMP project phase 4 and 15 EMAS element emissions were calculated and why they differ so drastically. 	R-I24-32

¹⁶ For a list of project element descriptions, see Appendix A entitle CRQ MP EIR Construction Emissions Inventory Remarks, p. 1 attached to the county December 2017 Draft Climate Change Technical Report for the MP Airport Master Plan Update.

			<ul style="list-style-type: none"> ○ Inconsistent Reporting of (i) Equipment Used for 200-Foot Runway Extension (PMP Item 7) and Additional 600-Foot Runway Extension and Runway Relocation (PMP Item 12) and (ii) Carbon dioxide emissions for these Items.¹⁷ <ul style="list-style-type: none"> ▪ Appendix A entitled CRQ MP EIR Construction Emissions Inventory Remarks lists “Off-Road Equipment” used in various project phases. (See unnumbered page 3.) For the Item 7 200-foot runway extension over pilings, Appendix A lists 2 bore rigs working 8 hours a day. For the Item 12 600-foot extension, Appendix A lists no bore rigs. Similarly, Appendix A omits references to Items (Phases) 1-3, 6, 8, 10 – 14, and 16. ▪ Explain in the Final PEIR why the noted omissions were made and recalculate the GHG emissions for the missing equipment. ▪ Recirculation Table 3.1.5-3 at page 3-76 reports GHG carbon dioxide emissions for PMP Item 7 (adding 200-feet to the runway) and Item 12 (relocating a 5100 foot runway + adding 600 more feet constructed on hundreds of very deep piling placed through Palomar landfills) respectively of 88 tons and 725 tons. <ul style="list-style-type: none"> • A 5700-foot runway is 28.5 times longer than a 200-foot runway extension. The GHG carbon dioxide emissions for a runway 28.5 times longer should be about 28.5 times greater. Multiplying the county-listed 88 metric tons for the 200-foot extension times 28.5 yields 2508 metric tons of carbon dioxide emissions for the 5700-foot runway relocation (including 600-foot extension). Yet county reports only 725 tons. • The GHG emissions for the relocation and extension should in fact be much more due to the need to drill hundreds of very deep holes for the 600-foot extension through trash. • Explain in the Final PEIR why the noted omissions were made and recalculate the GHG emissions for the missing equipment.
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R-I24-33

¹⁷ Id for description of PMP Items 7 and 12.

			<ul style="list-style-type: none"> • Explain in the Final PEIR how the miscalculations noted above affected the estimated PMP project costs. As county notes in its PEIR, the project alternative selected depends on 8 evaluation criteria including project cost. The omissions above likely significantly affected project costs, especially as related to the cost of drilling hundreds of very deep pilings. • Explain in the Final PEIR (i) how many truck movements county will require to dispose of hazardous material¹⁸ augured from more than 200 very deep holes drilled to install runway extension pilings; (ii) how far such trucks must drive round trip to ensure disposal in a hazardous waste landfill; and (iii) the air pollutants and GHG emissions from such trucks. 	R-I24-33 cont.
16	Table 3.1.5-1	Existing Conditions (2016) GHG Emissions Inventory	<ul style="list-style-type: none"> • BRR 26. Table 3.1-5 confirms the county bias (prejudgement) for its preferred project alternative. <ul style="list-style-type: none"> ○ The Table has no data for GHG emissions related to the vehicles traveling to and from Palomar. The Table footnote says; “<i>Off-airport motor vehicle emissions were only calculated for net increase in emissions.</i>” Translated, the omission means county staff and the BOS have prejudged the PMP and PEIR and have no intent to consider the “No Project” alternative. CEQA requires data to be provided for all project alternatives. ○ Also the table fails to state the level of GHG emissions from the methane gas from 30 acres of closed landfills at the airport. In theory, county today collects all the methane gas and “flares” it off at the “collection tower” in the airport parking lot. On several occasions in the past, airport asphalt cracks have released methane into the air. Also the mid and late 2000s underground landfill fires released methane gas and county was required to get APDC variances for 	R-I24-34

¹⁸ Recall that the landfill includes hundreds of thousands of A, B, C, and D batteries from toys, remote controls, power tools and other sources; light bulbs and fluorescent lights; various remodeling material including asbestos and vinyl flooring, which the contractor augurs will grind up and remove from the landfill.

			<p>such releases, which continued for some time.</p> <ul style="list-style-type: none"> ○ Methane Gas (CO₄) contributes substantial carbon dioxide emissions into the air. Hence, county's omission of methane data info from the GHG calculations is significant both because county ignores a major source and because methane has a much greater negative impact on GHG. The omitted data will provide a baseline against which the methane increases noted below may be judged. ○ In the Final PEIR, address the issues noted above. Especially explain what quantities of methane gas are daily burnt at Palomar and state the level of toxics [presumably small] that the burnt gas releases into the air. Also, provide the formula showing how much each unit of methane gas converts into carbon dioxide emissions. 	R-I24-34 cont.
17	Table 3.1.5-2	Sources of Airport GHG Emissions	<ul style="list-style-type: none"> • BRR 27. County's GHG Analysis Fails to Include Potent Landfill Methane Gas Emissions. County's Table 3.1.5-2 notes that "construction" GHG emissions evaluated include only emissions from backhoes, cranes, dozers, loaders, haul trucks and excavators. County's Table in Column 3 (CH₄) includes virtually no methane gas (CH₄) emissions for non-aircraft sources. County made no attempt to assess methane gas emissions from the landfills during construction or afterward. This omission is fatal to county's GHG analysis for the following reasons: <ul style="list-style-type: none"> ○ Palomar has 30 acres of underground landfills (Units 1, 2, and 3), which have an extensive underground methane gas collection system. Gas collected is piped to the tall Palomar Airport parking tower and burnt off. ○ County plans to extend the Palomar runway 800 feet into and over the 19-acre Unit 3 closed landfill immediately at the east end of the Palomar runway. Even if the runway is moved 120 feet to the north, as county proposes, the extension is over the landfill. ○ The county's existing plastic methane collection system sits 3 to 7 feet below the runway east end soil. At one of the county Palomar workshops, county consultant Kimley-Horn, confirmed that the existing methane gas collection system will have to be replaced. The flimsy methane gas plastic piping cannot 	R-I24-35

			<p>survive (i) extremely heavy bulldozers and graders passing over it thousands of times and (ii) county boring hundreds of holes 15 feet to 40 feet or more deep to install “cast-in-place” pilings to support grade beams, which in turn support an extended runway. This runway extension will only be a few inches above the remaining closed landfill underneath.</p> <ul style="list-style-type: none"> ○ As county’s GHG Appendix A entitled <i>CRQ MP EIR Construction Emissions Inventory Remarks</i> notes in the “<i>Construction Phase Remarks</i>,” relocating the Palomar runway will require 39 weeks of demolition plus construction time when the runway is moved north 120 feet. ○ County will destroy underground Unit 3 methane gas collection piping on two different occasions: in the next 7 years when the runway is extended 200-foot and in about 15 to 18 years when the runway is relocated and the short-term 200-foot extension is destroyed and relocated. ○ Recall that the statutory CEQA test as to whether an EIR must discuss public concerns is: <i>Do substantial facts exist to support the conclusion that the proposed project may have a significant impact on the environment</i> ○ As a result of the Palomar closed landfill underground fires in the 2000s, the San Diego Air Quality agencies required county to obtain a variance to emit landfill gases into the air. We know therefore that the agencies protecting air quality consider methane emissions into the air to be significant. ○ County says it needs to drill (augur) hundreds of very deep holes through the Unit 3 Palomar landfill trash so county can then (i) place tall towers of rebar cages into the holes and (ii) cast pilings from the bottom to the tops of the holes. The pilings will be cast in casings. The augurs will generate substantial heat as large metal bits bite into landfill trash from the 1960s and 1970s including tin cans; thousands of batteries from toys, remote controls, and tools. Each piling casing will be surrounded by a ½ inch or more air gap. ○ In the Final PEIR address the issues above and explain: <ul style="list-style-type: none"> ▪ Methane Gas Diversion During Construction: When the existing
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			<p>Palomar methane gas collection system is shut down during an 8 to 12 month construction period, how will the daily emissions of methane gas be diverted and kept out of the air. How much methane gas is burned daily when the system is operating? How much will escape into the air during construction operations? If county claims that “engineering solutions” have been found to control methane gas emissions, cite the specific literature to which county refers. [Our engineers advise that cast-in-place piling casings are notoriously leaky and county will not be able to control methane gas leakage, especially if the augurs encounter ground waters.] Provide sufficient detail and supporting evidence for county’s contentions for court review.</p> <ul style="list-style-type: none"> ▪ Piling Construction Auguring. When drilling through the trash, how hot will the auguring bits become? What temperature is “safe” to avoid a new landfill fire when county drills through the landfill trash? Recall that introducing water to cool the augur heads is not an option as county is prohibited from introducing water into the landfills for environmental reasons. ▪ Recalculation of GHG Emissions. In the Final PEIR, show how county calculated the GHG emissions attributable to landfill gas escaping. Provide all county assumptions relevant to such calculations. <p>• BRR 28. GHG Emissions from Longer Pilings Resulting from Dynamic Loads.</p> <ul style="list-style-type: none"> ○ Engineers design structures to handle both static and dynamic (moving) loads. A famous example of an engineering design failure was the collapse of an interior Hyatt Hotel walkway over an atrium, which could not handle the dynamic loads caused by hotel guests dancing on the walkway during a hotel event.¹⁹
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R-I24-36

¹⁹ See <https://www.engineering.com> “Hyatt Regency Walkway Collapse, posed on October 24, 2006

			<ul style="list-style-type: none"> County's stated PMP intent is to convert Palomar from a B-II airport handling predominantly small aircraft (more than 75% weighing less than 15,000 pounds) to a D-III airport handling aircraft typically in the range of 80,000 to 100,000 pounds. FAA-rated C and D aircraft also land at higher approach speeds than FAA-rated A and B aircraft. In the Final PEIR, state whether county has analyzed the effect of 130 very fast, heavy, FAA-rated C & D aircraft per day stressing more than 200 runway pilings. If so, what is the effect of such increased loads on the runway extension pilings and the landfill underneath? The amount of load will determine the piling length for hundreds of pilings and the methane gas amounts released as piling augur holes are drilled deeper and deeper to achieve the needed length to support the runway extension. In the Final PEIR, state who made the decision to omit landfill methane gas emissions from the analysis and why this decision was made and analyze the impact on GHG emissions that heavy aircraft landing on an extended runway will create. Provide the analysis showing county's assumptions, analysis, and calculations to support its conclusions so that engineers may review them. 	<p>R-I24-36 cont.</p> <p>R-I24-37</p>
18	Table 3.1.5-3	Total Construction GHG Emissions	<ul style="list-style-type: none"> BRR 29. The Hidden Retaining Walls. Table 3.1.5-3 lists GHG emissions for the 16 PMP project phases that county identifies (by name) in Appendix A (to county's initial Draft Report) entitled "<i>CRQ MP EIR Construction Emissions Inventory Remarks.</i>" County's PMP discusses the possibility of two massive retaining walls: one on the Palomar runway west side and one on the runway southeast side along Palomar Airport Road and El Camino Real. County does not separately call out the GHG emissions related to construction of these walls. A separate call out is needed for two reasons. <ul style="list-style-type: none"> First, constructing a massive retaining wall at the corner of PAR and ECR may require closing one or more traffic lanes for several weeks. The PAR and ECR already has a traffic Level of Service (LOS) of F [gridlock] at peak hours. Closing traffic lanes to construct the southeast retaining wall will increase motor 	<p>R-I24-38</p>

			<p>vehicle diversions and idling times especially during gridlock. In the Final PEIR, state whether county considered these GHG and non-GHG air quality impacts.</p> <ul style="list-style-type: none"> ○ Second, as county's consultant concedes, a Palomar runway west end retaining wall, is not needed for an 800-foot runway extension. Rather, this \$13 million retaining wall is listed simply to appease Supervisor Horn who has made requests since the December 2015 Board of Supervisor meeting to build a 900-foot, rather than 800-foot runway extension. <ul style="list-style-type: none"> ▪ As consultant states, the purpose of the Palomar runway west end retaining wall is simply to allow the county to create an extra 100-feet of length so that the runway in the future can be lengthened to 900-feet. In the Final PEIR, state the GHG emissions that are associated with constructing a massive retaining wall in the canyon area adjoining the Palomar runway west end. ▪ Explain in the Final PEIR why the wall is needed when (i) it does not support any of the county's stated project alternatives, namely the extension of the runway up to 800-feet and (ii) the impacts wildlife [see the discussion in BRR 9 above]. Provide sufficient detail for court review. • BRR 30. Methane Gas Emissions. In the Final PEIR, explain why column 4 of Table 3.1.5-3 reports virtually no methane gas (CH₄) emissions. 	R-I24-38 cont.
19	Table 3.1.5-4	Project-related GHG Emissions from Operational Activities	<ul style="list-style-type: none"> ▪ BRR 31. Proper Calculation of All Aircraft and All Aircraft Related Vehicle GHG Emissions. Table 3.1.5-4 refers to GHG emissions related to PAL 1 and PAL 2 (forecasted air carrier passenger levels until 2036). We need to understand what county does and does not include in its GHG calculations and why. In the Final EIR, confirm the following facts or correct them as appropriate: <ul style="list-style-type: none"> ○ Aircraft Emissions. Aircraft emissions should include all emissions for air 	R-I24-39

			<p>carriers (commercial-passenger-carrying regularly scheduled aircraft), corporate aircraft, all other general aviation aircraft, chartered aircraft, and helicopters. IF county includes GHG emissions ONLY for air carriers carrying the PAL 1 and PAL 2 forecasted passenger levels, state why. Also state what the GHG emission levels are for the other aircraft noted in this paragraph if they are not already included in Table 3.1.5-4. Otherwise, county again indicates its predisposition to ignore the No-Project alternative in favor of its preferred alternative – a CEQA violation.</p> <ul style="list-style-type: none"> ○ Passenger-Related Vehicle Emissions. We understand that although Table 3.1.5-4 may include GHG emissions for all Palomar aircraft, county includes GHG emissions only for air carrier passenger motor vehicle trips to and from Palomar. In other words, we understand county omits motor vehicle trips to and from Palomar for users of Palomar recreational vehicles, passenger jets, chartered aircraft (contract carriers such as those operated by Charter Flight Group operating at Palomar) and possibly Palomar employees and vendors. In the Final PEIR, state what county does and does not include and why. If county omits any of the noted data, provide it in the Final PEIR even if county claims for some reason that the data is not needed so that the BOS may properly compare the No Project alternative against county's preferred alternative. 	<p>R-I24-39 cont.</p> <p>R-I24-40</p>
20	Table 3.1.5-5	Future Conditions (2036) GHG Emissions Without Project	<ul style="list-style-type: none"> • BRR 32. County's Omitted GHG Data. County does not show all motor vehicle GHG emissions but notes "<i>Off-airport MV emissions were only calculated for net increase in emissions.</i>" Omitting the data does not comply with CEQA. <ul style="list-style-type: none"> ○ The PEIR must provide data to support all alternatives including the No Project alternative. By omitting the data, staff shows its bias for the preferred alternative. ○ Moreover, omitting the data omits a baseline that can be used to measure the accuracy of county's PMP project calculations. ○ Also, this table omits any methane gas (CH₄) data related to landfill emissions. 	R-I24-41

			<ul style="list-style-type: none"> ○ Correct these errors in the Final PEIR.
21	Tables 3.1.5-6 And 3.1.5-7	Future Conditions (2036) GHG Emissions Comparisons	<ul style="list-style-type: none"> • BRR 33. County's Missing GHG Methane Gas Emission Data. In the Final PEIR – as to Tables 3.1.5-6 and 3.1.5-7 GHG Emissions: <ul style="list-style-type: none"> ○ Confirm that the tables do not include any methane gas emissions from the Palomar Landfills. ○ Add the missing data for both the construction period [while several hundred piling holes are sunk and the methane gas collection system is either out of service or collecting only partial landfill methane gas emissions] and the twenty-year operational period as dynamic aircraft forces stress the pilings and landfill.
22	Tables 3.1.5-7 and 3.1.5-10 and 3.1.5-11	Net and Total GHG Emissions "per person" Emissions	<ul style="list-style-type: none"> • BRR 34. County's Flawed GHG SP Population Methodology. As explained in BRR 24 above, county's use of the "2036 SP" population number of 1,552,067 is unsupported and arbitrary and capricious. What county's tables at pages 3-75 to 3-78 – when contrasted with Table 2 entitled "<i>Existing Conditions (2016) Emissions Inventory</i> in county's December 2017 Draft report - show is the following: <ul style="list-style-type: none"> ○ Existing 2016 Palomar GHG Level = 11,850 metric tons annually; ○ PMP 2036 PAL 1 GHG Level = 40,574 metric tons annually; ○ PMP 2036 PAL 2 GHG Level = 51,213 metric tons annually. • In other words, county's project increases GHG emission levels by about 230% if its conservative passenger estimate is reached and 330% if its next highest estimate is reached. • County then says that increases of this level are not significant.²⁰

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R-I24-42

R-I24-43
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²⁰ County would no doubt note that Palomar air carriers and passenger levels will grow even without the county's PMP projects and therefore that Palomar GHG levels will increase even if the Board of Supervisors select no project. Possibly. However, over the last 5 years, several new air carriers have flopped at Palomar. Moreover, the FAA-approved passenger forecasts in the county 2018 – 2036

			<ul style="list-style-type: none"> Now recall that – for the reasons outlined above – the PAL 1 and PAL 2 emissions fail to include substantial other airport emissions [non-air carrier airport users and landfill GHG emissions], and the county’s methodology becomes even more suspect. In the Final PEIR, explain why county ignores these substantial increases in GHG emissions. Also, explain how much Palomar GHG emissions would increase if county were able to convince the FAA to modify its 400-foot separation requirement between aircraft on the runway and aircraft on taxiways, which would result in added idling of FAA-rated C and D aircraft concurrently operating on the Palomar runway and taxiway.²¹ 	R-I24-43 cont.
23	Table 3.1.5-12	County CAP Reduction Measures	<ul style="list-style-type: none"> BRR 35. County’s Limited and Near Worthless Mitigation Measures to Reduce County Airport GHG Emissions. <ul style="list-style-type: none"> At pages 3-79 to 3-80, county lists its mitigation measures to lesson GHG emissions. In essence, county aims to reduce mileage of county employees (carpooling?), switch energy sources, and build green buildings. These measures have nothing to do with reducing aircraft-related emissions. As noted above, one aircraft related measure that county could take to reduce GHG emissions [and improve VNAP noise compliance] would be increasing the intervals of aircraft taking off to avoid excessive aircraft taxiway idling. This should be easily achievable since county 20 years ago handled a peak of 286,000 annual operations and today handles about 155,000 annual operations. In the Final PEIR, discuss the aircraft related GHG reduction and mitigation measures that county is willing to explore related to aircraft operations. 	R-I24-44

PMP are much lower than county’s optimistic numbers. “Optimistic” means not supported by the last 10 years of Palomar Airport operations.

²¹ The FAA requires a 400-foot separation distance between runway and taxiway centerlines. County’s preferred project alternative is to build a runway with an approximately 362-foot rather than 400-foot separation. County says it will avoid safety concerns [the possibility of two large aircraft concurrently operating on the runway and a taxiway striking wings) by imposing operating restrictions. In other words, county will hold aircraft with their engines idling to assure concurrent operation of large aircraft does not occur. Such increased idling will increase GHG emissions.

			<ul style="list-style-type: none"> ○ IF county believes such measures are impossible, provide the specific contact information for the FAA personnel who have advised such measures are impossible so that we may pursue the issues with local members of Congress. ○ Explain in the Final PEIR why the Airport Deregulation Act and Clean Air Act discussed in BRR 18 do not allow such county aircraft interval spacing on county runways.
24	Appendix J	Energy and GHG Calculations for 16 PMP Projects	<ul style="list-style-type: none"> • BRR 36. County fails to provide basic assumptions to make its Appendix H data and calculations understandable. Also, some calculated amounts are incorrect. For instance: <ul style="list-style-type: none"> ○ PMP Projects 7 & 12 refer respectively to the 200-foot runway and Taxiway A extension and to the Relocation/Extension RW 6-24. BUT we see no description of the runway and taxiway width. Both length and width determine asphalt quantities used and GHGs emitted. ○ FAA AC 150/5300-13A provides FAA runway design criteria. Appendix A to this AC, Table A7-9, provide the airfield requirements for FAA-classified C/D/E-III airfields. The width specified for C and D – III runways is 150 feet. ○ County Appendix H reports for Project 7 an asphalt surface area of 27,000 square feet. A runway extension 200-feet long and 150-feet wide has a surface area of 30,000 square feet. Note moreover that the foregoing dimensions are for the runway extension only. Yet the Project 7 description is an extension for both the runway and Taxiway A. ○ In the Final PEIR, discuss the foregoing issue, add information to Appendix H showing runway and taxiway widths, and state what the proper calculation should be, how it was arrived at, and how GHG emission levels change. Also provide a revised project cost if the runway and taxiway area has been miscalculated. ○ County Appendix H reports for Project 8, the relocation and extension of a runway totaling 5700-feet, a square footage of 738,000 square feet. A runway 5700-feet long and 150-feet wide has a square footage of 855,000. In the Final

R-I24-44
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R-I24-45

			<p>PEIR, discuss the foregoing issue, add information to Appendix H showing the relocated runway width, and state what the proper calculation should be, how it was arrived at, and how GHG emission levels change. Also provide a revised project cost if the runway and taxiway area has been miscalculated.</p>	R-I24-45 cont.
25	Appendix J	Energy & GHG Calculations for PMP Projects 1 to 16: Project 4 WEST END RETAINING WALL	<ul style="list-style-type: none"> • BRR 37. County's PMP and PEIR Hide Supervisor Horn's Hidden Retaining Wall for his 900-Foot Runway and Its Environmental Impacts. <ul style="list-style-type: none"> ○ County staff has gone to great lengths to hide Supervisor Horn's unneeded \$13,760,000 Palomar runway west end massive retaining wall. ○ This unneeded retaining wall drastically escalates project costs, interferes with biological species, and increases air pollution, including GHG emissions. See county's March PMP Table at page ES-11, shown following this Bender Table Item 25 to understand the following discussion. ○ County's Table summarizes 16 proposed PMP project elements. The west end retaining wall is hidden from the public and even from Board of Supervisor members and is unneeded for the reasons below. No where do the 16 project elements refer to a retaining wall. <ul style="list-style-type: none"> ▪ Runway West End & East End EMAS. Notice that the referenced table refers to a runway west end EMAS costing \$25 million and to an east end EMAS costing \$11,240,000. ▪ Virtually Identical EMASs. The two EMAS s are virtually identical. They handle the same aircraft depending on whether aircraft take off toward the west or east. The cost for both should be nearly the same. In fact, the east side EMAS should cost more because it is in the middle of the 19-acre Palomar Unit 3 landfill and may require some special engineering. Otherwise ongoing landfill subsidence under the EMAS will distort it. ▪ "Massaged Appendix J Hidden Retaining Wall." The county 	R-I24-46

			<p>Appendix J “<i>Near-term Project 4 – Construction of EMAS</i>” comprises 10 pages. Neither the Project 4 title nor the immediately following “<i>Project Characteristics</i>” even refers to the retaining wall. Buried in the middle of the 10 pages is a two-word reference in Section 3.0 “<i>Construction Detail</i>” to a retaining wall. No dimensions are given. But we know the wall costs about \$13,760,000 (Total Project 4 cost of \$25,000,000 - \$11,240,000 EMAS cost).</p> <ul style="list-style-type: none"> ▪ Why is the West End Retaining Wall Unneeded and Why Would Its Approval as a Project Element Violate CEQA? <ul style="list-style-type: none"> • Horn’s Insistence. Supervisor Horn made clear on the record at the December 2015 Board of Supervisor meeting – which considered the McClellan-Palomar runway Feasibility Study – that he wanted a 900-foot runway extension, not an 800-foot runway extension. The county consultant Kimley-Horn & Associates, Inc. representative said that only about 840 feet were available for an extension. Supervisor Horn opined that there must be a way to make the extension 900-feet long. • 800-Foot PMP & PEIR Project Alternative. Nonetheless, the 2018 – 2038 [2016 – 2036?] PMP and PEIR repeatedly refer to an 800-foot, not 900-foot runway extension. • Horn’s Folly. To appease Supervisor Horn, the consultant came up with a way to add about 60 feet, namely to add the \$13,740,000 retaining wall. But this added 60 feet is not needed to extend the runway 800-feet – which was the December 2015 BOS direction to the consultant. • Why 900-Feet? Supervisor Horn has not said why he wants a 900-foot rather than 800-foot runway extension. But one airport tenant – who makes 500 flights or less a year out of the project 208,000 forecasted flights – apparently has an aircraft, which if
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			<p>taking off at maximum load to go to China – might benefit from 900-feet. It appears that Supervisor Horn wants to spend \$13,740,000 to favor one tenant who could just as easily leave for China from Lindbergh Field.</p> <ul style="list-style-type: none"> • ○ In the Final PEIR, address all the issues above and explain: <ul style="list-style-type: none"> ▪ Why is the Palomar runway west end massive retaining wall required for an 800-foot runway extension? Consultant has previously said no retaining wall is needed to relocate the service road around the runway. ▪ What biological species and/or habitat are saved with no wall? ▪ How many GHG emissions are saved by not building this wall? ▪ To the extent that county claims the retaining wall is needed to accommodate the service road around the runway: <ul style="list-style-type: none"> • Explain why the retaining wall was not needed when Kimley-Horn initially designed the 800-foot runway extension; and • Explain why the west end service road can not simply be routed through a 300 foot tunnel under the runway at a cost substantially less than \$13,760,000.
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McClellan-Palomar Airport		Airport Master Plan Update
Near-Term (±10-7 Years)		
Relocation of Segmented Circle	Pavement Removal/Installation	\$150,000
Relocation of the Lighting Vault	Building Relocation 100 SF	\$575,000
Relocation of the Glideslope Building and Antenna	Building Relocation ±360 SF	\$350,000
Relocation of Windsock Equipment	Pavement Removal ±760 SY	\$130,000
Construction of EMAS System serving RWY 24 (Includes Relocation of the Vehicle Service Road)	EMAS ±580 SY VSR ±9,100 SY	\$25,000,000
Relocation of ARFF Facility	±4,700 SF Facility	\$525,000
200' Extension of Existing Runway 06-24 and Taxiway A (Interim condition)	±11,600 SY	\$14,320,500
Phase Subtotal		\$26,730,000
Phase Subtotal*		\$41,050,500
Intermediate-Term (±13-12 Years)		
Removal of North Apron and Taxiway N	Pavement Removal ±43,000 SY	\$684,000
Enhancement of Near-Term Auto Parking	±800 SY of pavement	\$232,000
Removal of Fuel Farm on North Apron	±25,000 GAL	\$45,000
Preservation of area reserved for GA aircraft parking	±3 acres	TBD
Passenger/Admin/Parking Facility Improvements	±4 acres	TBD
Phase Subtotal		\$961,000
Long-Term (±13-20 Years)		
800' Relocation/Extension of RWY 06-24 (if completed in one phase)	±81,610 SY	\$27,850,000
Remove/Reconstruct Connector Taxiways	±13,000 SY	\$1,760,000
Remove/Reconstruct TWY A	±39,070 SY	\$14,360,000
Construction of EMAS System serving RWY 06	±580 SY	\$12,160,000
Relocation of EMAS System serving RWY 24	±580 SY	\$11,240,000
Relocation of NAVAIDS (ILS, GS, MALSR, PAPI)		\$2,800,000
200' Relocation/Extension of Runway 06-24 and Taxiway A (if completed in 2 phases)		\$9,366,000
Additional 600' Relocation/Extension of Runway 06-24 and Taxiway A (if completed in 2 phases)		\$30,960,000
Phase Subtotal (200' Extension plus 600' Extension)		\$82,646,000
Phase Subtotal (800' Extension)		\$70,170,000
Phased Development Total Costs		
Total Estimated Program Cost (200' Extension plus 600' Extension)		\$110,337,000
Total Estimated Program Cost (800' Extension)		\$97,861,000
Total Estimated Program Cost (200' Extension plus 600' Extension)*		\$124,657,500
Total Estimated Program Cost (800' Extension)*		\$112,181,500

Source: Kerney-Horn, 2017. * Includes interim 200' extension to existing Runway 06-24 and Taxiway A.

Executive Summary

ES-11

R-I24-46
cont.

26	§3.1.10 Energy Use & Conservation	County says “Based on the estimated existing vehicle miles traveled (VMT), patrons and tenants of the Airport are estimated to consume 309,205 gallons of gasoline and diesel annually.” See p. 3-111.	<ul style="list-style-type: none"> • BRR 38. The quoted language is ambiguous and hence the number of gallons of gasoline used for motor vehicles is unreliable. <ul style="list-style-type: none"> ○ What does “patrons and tenants” mean? Does it include all on-airport county employees and employees of airport tenants? ○ Does it include all vendors delivering items to the airport, for instance the regular fuel trucks filling up the underground airport fuel tanks? ○ Recall that in 2016, Palomar reported about 155,000 aircraft operations. Does “patrons and tenants” include all people on these flights? ○ Recall that the county 2013 Palomar Runway Feasibility Study reported 2,215 regional jobs created by Palomar (Slide 16 of County August 15, 2013 staff presentation to the Palomar Airport Advisory Committee.) Note that county’s numbers exclude vehicle trips by these people? ○ Using the county § 3.1.10 energy figures, the pilots and passengers aboard 155,000 aircraft in 2016 [and excluding on-airport employees and excluding the 2,215 persons whose jobs depend on Palomar use], allegedly used 309,305 gallons of fuel for their vehicles. Does this 309,305 figure make sense? <ul style="list-style-type: none"> ▪ If each aircraft had 1 passenger, then the pilot and the passenger (310,000 total for 155,000 flights) each used 1 gallon of fuel for their vehicles – assuming they made only 1 way trips to the airport, not the usual arrangement. ▪ In short, county’s estimated 309,205 gallons of fuel used for motor vehicles seems highly unreliable. BUT if the number is reliable, then it dispels county’s § 3.1.5 Greenhouse Gas Emissions Analysis suggestion (see multiple GHG tables including Table 3.1.5-7) that the “catchment/user” area for Palomar airport comprises 1,552,067 persons. If only 50,000 Palomar users travelled “county-wide” distances to reach Palomar, they used far more than 1 gallon of fuel and county’s 309,205 estimate is unreliable.
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			<ul style="list-style-type: none"> ○ Note that the county environmental analysis must be as equally broad or narrow as the county's economic analysis. The county can not in good faith, or in compliance with CEQA, claim that Palomar creates 2,215 county wide jobs and then limit its analysis of fuel used by Palomar – related motorists to only those on the airport. ○ In the Final PEIR, address the issues above and provide the following information for 2016: <ul style="list-style-type: none"> ▪ The number of county employees stationed at Palomar Airport; ▪ The number of county employees periodically visiting Palomar Airport; ▪ The number of tenant employees at the Airport; ▪ The number of vendors and frequency of vendor trips serving the Airport; ▪ The number of pilots and frequency of using the airport; ▪ The number of users on aircraft using the airport including those on air carriers, charter carriers, corporate aircraft, private recreational vehicles, and helicopters using the airport; ▪ The number of regional jobs dependent on Palomar Airport; ▪ The total number of miles traveled by all the groups above; ▪ The total number of gallons of gasoline and diesel used by all the groups above; ▪ The levels of GHG emissions and of other air quality pollutants produced and the mitigation measures county is adopting to reduce them.
26 A		County GHG Reduction Measure T-3.5 Increasing Electrical Vehicles	<ul style="list-style-type: none"> • BRR 38A. County says it will reduce air quality pollutants by using electric vehicles. Electric vehicles reduce air quality emissions including GHG emissions at the point of use, namely when the car is driven. But several studies

R-I24-47
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R-I24-48

			show that the power plants producing the electricity for electric vehicles produce as much or more pollution than vehicles using fossil fuels. ²² In the Final PEIR, explain (i) which power plants generate the electric power for vehicles driven within 100 miles of Palomar, (2) whether these power plants rely on fossil fuels including coal, (3) when the power plant was upgraded to remove air quality pollutants, and (4) the specific data that shows that electric vehicles receiving electric power from these plants will in fact create less pollution than non-electric cars.	R-I24-48 cont.
27	§ 3.1.10.2.1 Energy Use & Conservation	Construction-Related Energy Use	<ul style="list-style-type: none"> • BRR 39. Wasteful Construction & Demolition. County says: <i>"A significant impact related to energy resources would occur if the Proposed Project would: Result in the wasteful and inefficient use of nonrenewable resources during the construction phase of the Proposed Project."</i> County proposes (See 2018-2038 PMP page ES-11): <ul style="list-style-type: none"> ○ Within 7 years to spend: <ul style="list-style-type: none"> ▪ \$14,320,500 to extend the Palomar runway 200-feet; ▪ \$25,000,000 to build a west runway EMAS AND THEN ○ Within 10 more years to throw away the foregoing \$39,320,500 and spend \$70 million more to relocate the entire runway and taxiways and navigational lighting 120 feet north EVEN THO COUNTY CONC EDES; <ul style="list-style-type: none"> ▪ Palomar Airport will handle by 2036 30% fewer aircraft than county handled at Palomar twenty years ago; and ▪ The physical life of new airport runway construction is 20 to 30 years; and 	R-I24-49

²² See, for instance, Ohio State Abstract: *"Will Electric Vehicles Really Reduce Pollution?"* available at <https://www.physics.ohio-state.edu/~wilkins/writing/Samples/policy/voytishlong.html>

			<ul style="list-style-type: none"> ▪ FAA-awarded Airport Improvement Program (AIP) grants anticipate that an FAA-financed improvement shall remain in place for at least 20 years.
			<ul style="list-style-type: none"> • In the Final PEIR explain why the construction of a 200-foot runway extension and west runway end EMAS is needed and why substantial quantities of fuel will be consumed and GHG emissions and other air pollutants created when such improvements will be destroyed so soon and when: <ul style="list-style-type: none"> ○ Even a 200-foot runway extension would not accomplish Supervisor Horn's apparent desire to allow one airport tenant jet a week to fly to China without refueling after leaving Palomar; and ○ The only air carrier foreseeably in Palomar's future (California Pacific Airlines) stated on the record at the PAAC meeting that it does not need a runway extension to operate even though it ultimately plans to fly to 5 to 10 cities. ○ Explain what specific fuel efficiency, GHG emission, and general air pollution mitigation measures county will commit to offset the unneeded construction and demolition.
28	§ 3.1.10 Energy Use & Conservation	Construction Related Energy Use, pp. 3-117 to 3-119	<ul style="list-style-type: none"> • BRR 40. Missing Energy Calculations Related to Drilling Several Hundred very Deep Landfill Holes. We have examined new county Appendix J, entitled "<i>Energy Modeling Calculations</i>" closely including by searching the terms "bore," "augur," and "drill." The term "bore" occurs in Project Phase 7 related to the 200-foot runway extension but does not appear in Project Phase 12, which involves the runway relocation and construction of a new 800-foot runway extension in the middle of the 19-acre Unit 3 Palomar runway east end closed landfill. It appears that as to Phase 12, county included no energy calculations related to county drilling several hundred holes from 15 feet to 40 feet deep. In the Final PEIR, state: <ul style="list-style-type: none"> ○ the total number of holes that county estimates it will need to drill

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R-I24-50

R-I24-51

			<p>through the landfill for Project Phase 12 involving the relocation of the runway and addition of 800 feet of runway on grade beams on piles over the closed landfill;</p> <ul style="list-style-type: none">○ the estimated depth of the holes;○ the number of augurs/drill equipment that will be needed;○ the estimated time to drill all the needed holes;○ the “construction” period for such holes;○ the number of cranes that will be required to lift the “rebar cages” into each of the holes drilled prior to the time of casting the pilings in the holes;○ the amount of fuel required for such cranes; and○ the total amount of fuel expended to construct the 800-foot addition over the Unit 3 closed landfill.																																																
29	§ 3.1.10 Energy Use & Conservation; Tables 3.1.10-3 and 3.1.10-4	Fuel Consumption Comparison PAL 1 & PAL 2	<ul style="list-style-type: none">• BRR 41. Internally Consistent County Aviation Fuel Use Information. We find these two tables confusing, and likely unreliable. The Tables provide: <p style="text-align: center;">Table 3.1.10-3. Fuel Consumption Comparison (PAL 1) (gallons)</p> <table><tr><th>Scenarios</th><th>Aircraft</th><th>APU/GSE</th><th>Gasoline</th><th>Diesel</th><th>TOTAL</th></tr><tr><td>No Project</td><td>535,471</td><td>70,100</td><td>298,355</td><td>16,589</td><td>920,515</td></tr><tr><td>PAL 1</td><td>677,513</td><td>83,273</td><td>301,910</td><td>16,786</td><td>1,079,482</td></tr><tr><td>Difference</td><td>142,042</td><td>13,173</td><td>3,555</td><td>197</td><td>158,967</td></tr></table> <p style="text-align: center;">Table 3.1.10-4. Fuel Consumption Comparison (PAL 2) (gallons)</p> <table><tr><th>Scenarios</th><th>Aircraft</th><th>APU/GSE</th><th>Gasoline</th><th>Diesel</th><th>TOTAL</th></tr><tr><td>No Project</td><td>535,471</td><td>70,100</td><td>298,355</td><td>16,589</td><td>920,515</td></tr><tr><td>PAL 2</td><td>704,300</td><td>95,291</td><td>569,432</td><td>31,600</td><td>1,400,683</td></tr><tr><td>Difference</td><td>168,829</td><td>25,191</td><td>271,077</td><td>15,011</td><td>480,108</td></tr></table> <p style="text-align: right;">N</p> <p>Notice that Table 3.1.10-3 refers to 535,471 gallons of aviation fuel used by aircraft</p>	Scenarios	Aircraft	APU/GSE	Gasoline	Diesel	TOTAL	No Project	535,471	70,100	298,355	16,589	920,515	PAL 1	677,513	83,273	301,910	16,786	1,079,482	Difference	142,042	13,173	3,555	197	158,967	Scenarios	Aircraft	APU/GSE	Gasoline	Diesel	TOTAL	No Project	535,471	70,100	298,355	16,589	920,515	PAL 2	704,300	95,291	569,432	31,600	1,400,683	Difference	168,829	25,191	271,077	15,011	480,108
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R-I24-51
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R-I24-52

for the No Project alternative and 677,513 gallons if county achieves its 2036 PAL 1 passenger forecast level of 304,673 annual enplanements. Yet the county McClellan-Palomar Official website on July 5, 2018 under "Fuel Flowage" [<https://www.sandiegocounty.gov/dpw/airports/palomar.html>] gave the following data for just the first quarter of 2018:

Sales by Supplier/FBO @ CRQ

Jet A 1000s of gallons delivered

2018 1st Quarter

Fuel Supplier FBO	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
AvFuel Atlantic Avia / PAC	166	286	240	0	0	0	0	0	0	0	0	0	692
Epic Jet Source	145	15	0	0	0	0	0	0	0	0	0	0	160
Ascent SCIF / Magellan	67	75	61	0	0	0	0	0	0	0	0	0	203
Western Western Flight	29	32	30	0	0	0	0	0	0	0	0	0	91
Total	407	408	331	0	0	0	0	0	0	0	0	0	1146

R-124-52
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			Sales by Supplier/FBO @ CRQ AvGas 1000s of gallons delivered 2018 1st Quarter																																																																																	
			<table><tr><th>Fuel Supplier FBO</th><th>Jan</th><th>Feb</th><th>Mar</th><th>Apr</th><th>May</th><th>Jun</th><th>Jul</th><th>Aug</th><th>Sep</th><th>Oct</th><th>Nov</th><th>Dec</th><th>Total</th></tr><tr><td>Ascent SCIF / Magellan</td><td>8</td><td>4</td><td>4</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>16</td></tr><tr><td>Western Western Flight</td><td>18</td><td>20</td><td>18</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>56</td></tr><tr><td>True North Fuel Western Flight</td><td>3</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>3</td></tr><tr><td>Total</td><td>29</td><td>24</td><td>22</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>75</td></tr></table>												Fuel Supplier FBO	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Ascent SCIF / Magellan	8	4	4	0	0	0	0	0	0	0	0	0	16	Western Western Flight	18	20	18	0	0	0	0	0	0	0	0	0	56	True North Fuel Western Flight	3	0	0	0	0	0	0	0	0	0	0	0	3	Total	29	24	22	0	0	0	0	0	0	0	0	0	75
Fuel Supplier FBO	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total																																																																							
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Western Western Flight	18	20	18	0	0	0	0	0	0	0	0	0	56																																																																							
True North Fuel Western Flight	3	0	0	0	0	0	0	0	0	0	0	0	3																																																																							
Total	29	24	22	0	0	0	0	0	0	0	0	0	75																																																																							
			<p>Notice that the official county website reports the fuel flowage in thousands of gallons (1000s). So for just the 1st Q of 2018 county reported 1,146,000 of Jet A fuel and 75,000Av Gas. It seems that county is reporting aviation fuel levels 2 to 8 times higher than county reports in recirculated Table 3.1.10-3 above. Similarly, the county Palomar website data differs materially for county's comparison of the No Project v. PAL 2 scenario.</p> <p>In the Final PEIR, (i) describe the source of the data that county used to prepare Tables 3.1.10-3 and 3.1.10-4, (ii) explain the discrepancies between the county PEIR data and the county website data, and (iii) provide corrected Tables as necessary.</p> <p>ALSO EXPLAIN WHETHER THE AIRCRAFT GALLONS THAT COUNTY USED TO CALCULATE ITS GHG EMISSIONS IN REVISED DRAFT PEIR SECTION 3.1.5 ENTITLED GREENHOUSE GAS EMISSIONS ARE SIMILARLY FLAWED AND REQUIRE RECALCULATION.</p>																																																																																	

R-124-52
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30	§ 3.1.10 Energy Use & Conservation; Tables 3.1.10- 3 and 3.1.10-4	Fuel Consumption Comparison PAL 1 & PAL 2	<ul style="list-style-type: none"> • BRR 42. We incorporate the comments in BRR 41 here. Another way of testing the county-provided Palomar aircraft fuel use data for accuracy is to compare the data given against the number of Palomar Airport annual operations and the aircraft mix [A, B, C, or D] – which determines the miles per gallon [A aircraft] or gallons per mile [B, C, and D aircraft]. <ul style="list-style-type: none"> ○ County says in Table 3.1.10-3 that with the No Project alternative²³, Palomar Aircraft used only 535,471 gallons of aviation fuel in a year. ○ County forecasted about 16,900 business jet operations in 2016 [general aviation B/C/D aircraft].²⁴ County also forecasted about 12,410 air carrier [regularly scheduled carriers of passengers. Hence, about 30,000 of Palomar's 155,000 operations in 2016 were B, C, and D sized aircraft. ○ As shown in the table on the next page, FAA-rated aircraft weighing less than 12,500 pounds usually get roughly 10 miles per gallon. In contrast, corporate jets and air carrier jets in the B, C, and D categories [weighing 20,000 to 90,000 pounds] average 1 to 2 GALLONS per mile. ○ According to county, county needs to extend the Palomar runway so jets can fly farther, as far as to China. But as seen from the chart below, most B, C, and D aircraft already using Palomar can easily reach distances up to 2500 miles – while gulping 1 to 2 gallons of aviation fuel per mile and without needing a longer runway. ○ Based on the foregoing information, consider the table below, which shows how much fuel 155,000 Palomar aircraft operations would require under ultra conservative assumptions. ○ Conclusion 1: BOTH the actual Palomar fuel flowage delivered in 2016, as taken from the county's own website as discussed in BRR 41 above,
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R-I24-53

²³ County's use of the term No Project alternative is confusing unless county references a specific year. In 2016 Palomar had about 155,000 operations [aircraft flights]. In 2036 – without a runway extension – Palomar may have 180,000 operations if the air flight industry recovers to pre 2006 levels. As county recognizes in its 2018 PMP, Palomar growth continues with or without a runway project. Hence, when referring to the "No Project" alternative, county should clarify what it means.

²⁴ See Table 8A at page 8.2 of County's 2011/2012 Palomar Runway Feasibility Study.

			<p>and a common sense look at how much fuel the 155,000 Palomar flights required in 2016, show that county's Recirculated PMP Section 3.1.10 entitled "Energy Use and Conservation" is not accurate.</p> <ul style="list-style-type: none">○ Conclusion 2: Because county's fuel usage calculations are in error, its GHG calculations and general air quality calculations are in error. <ul style="list-style-type: none">• In the Final PEIR, address all the issues above and in the tables below, explain the discrepancies, and provide the corrected numbers. Also, explain why recirculation of the county Energy Efficiency analysis does not require recirculation given county's errors.
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cont.

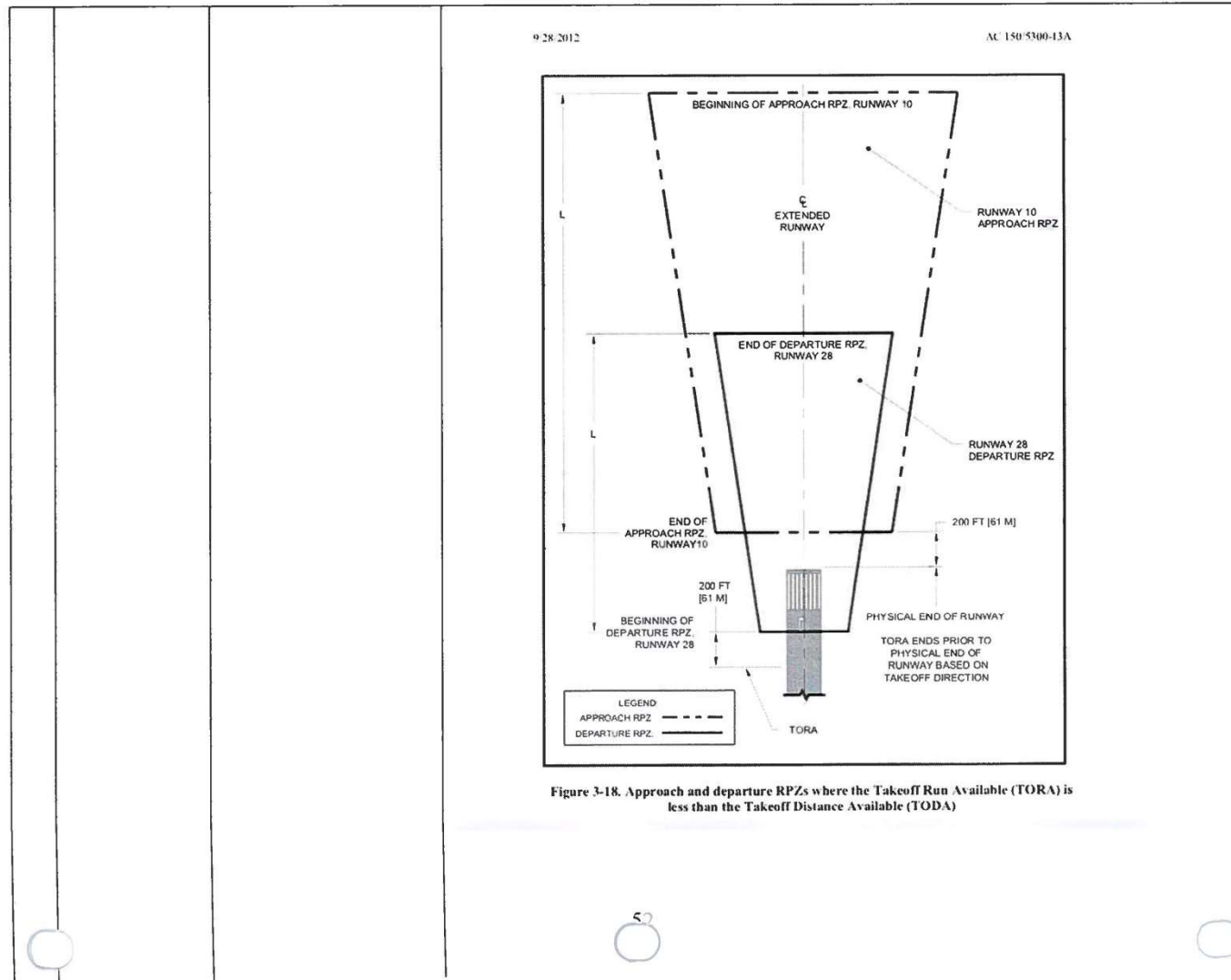
A Class Aircraft		Max Fuel lb	Max Fuel gal	Max NM Range	Gal Per Mile
Beechcraft Bonanza Raytheon Beech Bonanza 36		619	92	920	9.97
Piper Warrior PA -28 Cherokee Series			50	465	9.30
Cirrus SR22 EADS Socats TB-9 Tampio			42	556	13.33
B Class Aircraft					
Beechcraft Baron Raytheon Beech Baron 58		390	58	1,480	25.46
Cessna 680 Citation Sovereign		11,235	1,674	3,200	1.91
Embraer EMB120 Brasilia		24,030	3,581	1,750	0.49
C Class Aircraft					
Cessna 750 Citation X		13,060	1,946	3,460	1.78
Bombardier CRJ-700		19,450	2,899	1,434	0.49
Embraer ERJ170		9,335	1,391	2,150	1.55
D Class Aircraft					
Gulfstream GV 450		29,500	4,396	4,350	0.99
Gulfstream G 550 (Not on the List)		41,300	6,155	6,750	1.10
Gulfstream G 650		44,200	6,587	7,000	1.06
Helicopters					
Sikorsky SH-60 Seahawk		2,040	304	450	1.48
Robinson R44 Raven		279	42	300	7.22

R-I24-53
cont.

			<table><tr><th colspan="6">Bender Comparison of 2016 No Project Aircraft Fuel Use with County Estimate</th></tr><tr><th></th><th>FAA Aircraft Category</th><th>Allocation of 155,000 Flights Among FAA Categories</th><th>Assumed Annual Distances Traveled per flight</th><th>Gallons of Aviation Fuel Required</th><th>Total 2016 Annual Fuel Required in Gallons</th></tr><tr><td>1</td><td>A</td><td>125,000</td><td>100 miles/per flight</td><td>10 per flight</td><td>1,250,000</td></tr><tr><td>2</td><td>B</td><td rowspan="3">30,000 (combined B, C, D)</td><td rowspan="3">1000 miles per flight</td><td rowspan="3">1000 per flight</td><td rowspan="3">30,000,000</td></tr><tr><td>3</td><td>C</td></tr><tr><td>4</td><td>D</td></tr><tr><td colspan="5">Total 2016 Gallons of Palomar Aircraft Fuel Required Using Ultra Conservative Assumptions</td><td>31,250,000</td></tr></table> <p>Yet County's Tables 3.1.10-3 and 3.1.10-4 in its Revised Draft PEIR circulated in June 2018 in its Section 3.1.10 entitled Energy Use and Conservation say Palomar Aircraft used only 535,471 gallons under the No Project scenario and 677,513 and 704,300 gallons respectively for the forecasted increased passenger flights. The above figures show:</p> <ul style="list-style-type: none">• Actual existing Palomar fuel use under the No Project alternative is far, far higher than the recirculated PEIR discloses.• Even if the average distance for the 30,000 air carrier and corporate flights were cut to 500 miles, the Gallons of aviation fuel for A, B, C, and D aircraft would be 16,250,000 rather than the county-listed 535,471.• Note also that county in PEIR Table 4-1 (March PEIR circulated) entitled "<i>Air Carrier Operations Forecast – PAL 2</i>" forecasts 27,740 total commercial operations by 2036. Such commercial air carrier operations do not include the corporate B, C, and D aircraft flying as far as China.	Bender Comparison of 2016 No Project Aircraft Fuel Use with County Estimate							FAA Aircraft Category	Allocation of 155,000 Flights Among FAA Categories	Assumed Annual Distances Traveled per flight	Gallons of Aviation Fuel Required	Total 2016 Annual Fuel Required in Gallons	1	A	125,000	100 miles/per flight	10 per flight	1,250,000	2	B	30,000 (combined B, C, D)	1000 miles per flight	1000 per flight	30,000,000	3	C	4	D	Total 2016 Gallons of Palomar Aircraft Fuel Required Using Ultra Conservative Assumptions					31,250,000
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3	C																																				
4	D																																				
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31	New County RPZ Figures	County Depictions of Runway Protection Zone Areas.	BRR 43. County's Confusing RPZ Diagrams: Non-Conformance to FAA Standard Diagrams. The county method of describing Runway Protection Zones in its original PEIR and recirculated PEIR drawings is confusing for several reasons. To see why, look at the below FAA drawing, which depicts a runway end departure RPZ and approach RPZ in the same drawing.																																		

R-I24-53
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R-I24-54



R-124-54
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32	New County RPZ Figures (con'd)	County depiction of RPZs (con'd)	<ul style="list-style-type: none"> Now compare the FAA drawing to the county drawings in the recirculated PEIR section called “<i>Figures associated with Runway Protection Zones.</i>” County drawings do not say whether they refer to departure or approach RPZs. Readers are left to guess. Nor is it clear that county provides drawings for both scenarios (departure and approach). In the Final PEIR (i) confirm that county has included drawings for all departure and all approach RPZs for aircraft taking off and landing in all weather conditions [i.e. departure and approach for Runway 24 and Runway 06]; (ii) either substitute the FAA-approved format or more clearly label the county diagrams to explain whether each diagram shows (aa) Runway 24 or Runway 06, (ii) departure RPZs and approach RPZs, and (iii) the assumptions made as to where the takeoff and landing runway thresholds are located.²⁷ Also assure that county provides information for the runway east end with and without an installed EMAS system since an east end EMAS will not be installed for 10 to 15 years and perhaps never. Also, explain how the length of the RPZs which
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R-I24-54
cont.

²⁵ FAA AC 150/5300-13A in paragraphs 105(f), 213a., 322 d. and especially 310.

²⁶ RPZs: Areas on the ground in which development is minimized to protect persons and property from aircraft operations, especially crashes.

²⁷ Palomar landing thresholds for aircraft landing from the east [typical] and from the west [“Santa Ana winds” change when an EMAS is installed to assure there is a buffer area between the EMAS and runway to minimize the chances of landing aircraft flipping in the EMAS resulting from too high an approach speed.

			<p>county has depicted vary with aircraft type and airport instrument requirements. See the footnoted FAA approach and departure table below.²⁸</p> <ul style="list-style-type: none">• BRR 44. Incomplete RPZ Drawing Legends. In addition most of the Recirculated Drawings showing proposed runway modifications are confusing. Drawings 4-2a, 4-3a, 4-4a, and 4.5a all show yellow cross-hatched diamond shaped areas; but no Drawing legend explains what this cross hatching means. The only drawing Legend reference to cross-hatched areas are to blue EMAS areas. Perhaps the yellow cross-hatched diamonds show demolished areas. The reader is left to guess. CEQA requires that governmental entities present information in an understandable way. County fails this test. Explain in the Final PEIR what the drawing yellow cross-hatched diamond shaped areas mean and recirculate the drawings so the public can comment intelligently.
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cont.

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AC 150/5300-13A

9/28/2012

Table 3-2. Approach/departure standards table

Runway Type		DIMENSIONAL STANDARDS*					Slope/ OCS
		A	B	C	D	E	
1	Approach end of runways expected to serve small airplanes with approach speeds less than 50 knots. (Visual runways only, day/night)	0 (0)	120 (37)	300 (91)	500 (152)	2,500 (762)	15:1
2	Approach end of runways expected to serve small airplanes with approach speeds of 50 knots or more. (Visual runways only, day/night)	0 (0)	250 (76)	700 (213)	2,250 (686)	2,750 (838)	20:1
3	Approach end of runways expected to serve large airplanes (Visual day/night); or instrument minimums ≥ 1 statute mile (1.6 km) (day only).	0 (0)	400 (122)	1000 (305)	1,500 (457)	8,500 (2591)	20:1
4	Approach end of runways expected to support instrument night operations, serving approach Category A and B aircraft only. ¹	200 (61)	400 (122)	3,800 (1158)	10,000 ² (3048)	0 (0)	20:1
5	Approach end of runways expected to support instrument night operations serving greater than approach Category B aircraft. ¹	200 (61)	800 (244)	3,800 (1158)	10,000 ² (3048)	0 (0)	20:1
6	Approach end of runways expected to accommodate instrument approaches having visibility minimums $\geq 3/4$ but < 1 statute mile (≥ 1.2 km but < 1.6 km), day or night.	200 (61)	800 (244)	3,800 (1158)	10,000 ² (3048)	0 (0)	20:1
7	Approach end of runways expected to accommodate instrument approaches having visibility minimums $< 3/4$ statute mile (1.2 km).	200 (61)	800 (244)	3,800 (1158)	10,000 ² (3048)	0 (0)	34:1
8 ^{3,5,6,7}	Approach end of runways expected to accommodate approaches with vertical guidance (Glide Path Qualification Surface [GQS]).	0 (0)	Runway width + 200 (61)	1520 (463)	10,000 ² (3048)	0 (0)	30:1
9	Departure runway ends for all instrument operations.	0 ⁴ (0)	See Figure 3-4.				40:1

* The letters are keyed to those shown in Figure 3-2.

R-I24-56

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33	New County RPZ Figures (con'd)	County depiction of RPZs (con'd) – ALL FIGURES	<p>BRR 45. Unsubstantiated Size Differences Between Existing RPZs and Future RPZs. In the figures depicted, county shows existing and future RPZs. County uses blue to show existing and purple to show future. Nearly always, county depicts the existing trapezoidal RPZ areas as larger than the future areas. In the Final PEIR, (i) explain how the RPZ trapezoidal areas will be smaller when county lengthens and/or relocates the runway north about 120 feet and attracts larger, faster aircraft and (ii) provide the assumptions, data, and analysis that county relies on to reach these conclusions. If the recirculated RPZ drawings are incorrect [when comparing before and after RPZ sizes], recirculate the drawings again for comment.</p>	R-I24-57
34	New County RPZ Figures (con'd)	County depiction of RPZs (con'd) – ALL FIGURES	<p>BRR 46. Continued Confusing County PMP Project Alternative Terminology. The purpose of the PEIR circulation is to inform the public of impacts of the project county proposes. County's inconsistent use of terminology thoroughly confuses the public for these reasons:</p> <ul style="list-style-type: none"> • County in Table 4-1 entitled "Comparison of Project Alternatives to Project Objectives" refers to: <ul style="list-style-type: none"> ○ its Proposed Project in the 1st evaluation column as "D-III Modified Standards Compliance Alternative;" ○ to a rejected project in evaluation column 5 as "D-III Modified Standards Alternative;" • County in the Recirculated Revised Draft PEIR table entitled "<i>Figures associated with Runway Protection Zones</i>" refers to Figure numbers 1-4 to 4-6b. County refers to multiple D-III alternatives including: <ul style="list-style-type: none"> ○ <i>D-III Modified Standards Alternative</i> in Figure 4-3A; ○ <i>D-III Modified Standards Alternative Runway Protection Zone</i> in Figure 4-3B; ○ <i>D-III On-Property Alternative</i> in Figure 4-4a; and ○ <i>D-III On-Property Alternative Runway Protection Zones</i> in Figure 4- 	R-I24-58

			<p>4b.</p> <ul style="list-style-type: none">• NOWHERE in the recirculated tables does county refer to its Table 4-1 Propos Alternative: “D-III Modified Standards Compliance Alternative.” Hence, county has provided no RPZ information about its preferred project alternative, a fatal error. County’s failure is especially noteworthy because multiple commentators in their March 2018 PEIR comments (including the city of Carlsbad and the Benders) noted county’s confusing terminology. It is apparent that before rushing to recirculate certain PEIR sections that county did not read the comments received 10
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			<p>weeks ago.</p> <ul style="list-style-type: none">• County further confuses the issue by referring to its Preferred Alternative in the March 2018 PMP at page ES-9 as the “C-III Modified Standards Compliance.”²⁹ See the PMP/PEIR table below.• For the above reasons, we have no idea what RPZs county links to its Preferred Table 4-1 Alt and the RPZs need to be corrected, properly identified, and recirculated.• In the Final PEIR address these issues. Explain how any Board of Supervisor member or any member of the public or any reviewing court could reasonably determine what county’s true preferred project alternative is from the PMP and PEIR county staff prepared. If county staff cannot explain this, then a complete PMP and PEIR need to be recirculated.
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cont.

McClellan-Palomar Airport	Airport Master Plan Update
29	<p>below. Once the full extension is constructed EMAS would be needed on the east end as well to provide the required length of safety area.</p> <p>Shift Runway</p> <p>One of the projects identified in the Airport Master Plan Update is to shift the Runway to the north by 123-feet to increase the distance between the runway and the taxiway. The shift will improve safety for aircraft types currently and projected to operate at the Airport by providing additional wingtip clearance during simultaneous runway/taxiway operations.</p> <p>Completion of this project would eliminate the north aircraft parking area because this would fall into the new Runway Object Free Area. This would require relocating 30+ aircraft currently parked in this location. It would also require removal of the self-service fuel facility on the north side of the airfield that is used by those aircraft.</p> <p>Runway Extension</p> <p>McClellan-Palomar Airport is home to a wide range of aircraft, including business jets. The existing runway length of 4,897 feet does not provide aircraft operators that currently use the Airport the same benefits they would have with a longer runway. This is because these aircraft need more runway length than currently exists to takeoff fully-fueled and loaded, which would then allow them to fly farther and be more competitive in national and global markets. A business case analysis was completed as part of the Feasibility Study to aid in the assessment of an extension versus no extension. The McClellan-Palomar Airport Master Plan Update includes a runway extension option of up to 800 feet. This length was selected because it is the longest that could be accommodated on existing Airport land without the need to purchase additional land. An extension could be built in phases depending on funding availability. The Airport Master Plan also explores an interim option of extending the runway 200' in the current location.</p> <p>Another benefit of a runway extension identified by the study is that it would reduce aircraft noise for residential communities west of the Airport. Shifting the beginning of the runway further east would mean aircraft would increase flight elevation sooner. Aircraft would be higher, and therefore quieter to those on the ground, as they fly west towards the coast. This would result in the footprint for noise sensitive areas moving east over industrial-use properties and even farther away from residential properties to the southwest. However, because the landing threshold would remain in the current location, noise to the east of the Airport from landing aircraft would not increase.</p> <p>Larger corporate aircraft often stop and refuel at nearby airports with longer runways such as San Diego International Airport in order to reach their destination. This poses a significant inconvenience to operators, leads to lower fuel sales at CRQ, and increases the amount of fuel aircraft consume and emissions released into the environment.</p> <p>Proposed runway extensions of varying lengths are identified in the Alternatives Analysis for the purposes of this Airport Master Plan Update, in order to accommodate existing and projected operating aircraft at CRQ including the anticipated future design aircraft (Gulfstream G650), an extension of up to 800 feet is recommended to provide the Airport with approximately 5,700 feet of runway length. Longer options were considered but determined to be infeasible because, with the change to the preferred option of C-III Modified Standards Compliance alternative, any extension longer than 800 feet would require purchasing land around the Airport in order to comply with FAA safety requirements.</p> <p>New Aircraft Rescue and Fire Fighting Facility</p> <p>One of the specific components of this Airport Master Plan Update is to identify alternatives for the relocation of the existing ARFF facility. The existing facility is a canopy structure. A new proposed ARFF facility would be constructed to "Index B" standards identified in FAA guidance documents. The recommended site is located south of the existing Airport traffic control tower and west of an access road</p>
	ES-9

R-I24-58
cont.

35	New County RPZ Figures (con'd)	County depiction of RPZs (con'd) – ALL FIGURES	<p>BRR 47. County Fails to Correlate the Project RPZs to Actual Properties Impacted. County says in its March 2018 PEIR:</p> <p style="text-align: right;">Chapter 2 Significant Environmental Effects</p> <p>Analysis</p> <p>The SDCRAA is the responsible agency within San Diego County for regulating land uses within the AIAs of 16 public-use and military airports. As part of that responsibility, the SDCRAA approved an ALUCP for the Airport, which was adopted on January 25, 2010 and amended twice on March 4, 2010 and December 1, 2011. However, because the Proposed Project includes improvements on airport property, the ALUCP's land use authority does not apply since all uses and future improvements are regulated by FAA.</p> <p>As a component of the Master Plan Update, the Proposed Project would include shifting the runway north and extending the runway's east end. As such, the associated safety areas, including the RPZs would result in a corresponding shift. As part of the proposed improvements, land within RPZs should be secured at the earliest opportunity, but are not required to be secured prior to implementation of the Master Plan Update. Lands located within RPZs be sought overtime as opportunities arise. However, the marginal shift in RPZs would not render existing or approved land uses incompatible with an applicable ALUCP or constitute a hazard to aviation. The Airport Master Plan Update further describes how the Proposed Project would comply with FAA design standards and therefore, would not introduce new or increased safety hazards to people in the Airport vicinity. Therefore, the Proposed Project would not result in a significant airport hazard.</p> <p>2.3.2.4 Emergency Response Plans</p> <ul style="list-style-type: none"> As just quoted, county says "... [B]ecause the Proposed Project includes improvements on airport property, the ALUCP's land use authority does not apply since all uses and future improvements are regulated by the FAA." <ul style="list-style-type: none"> What the county intended to say might be accurate. What county did say is inaccurate. The SDRAA ALUC has notified the county that before the county presents its PMP and PEIR to the Board of Supervisors, county must file an application with the ALUC to determine how the proposed county 2018 – 2038 PMP impacts the noise and safety areas (including the RPZs) around Palomar Airport. Accordingly, the ALUC does have
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R-124-59

			<p>the authority pursuant to the California Public Utilities Code to require county to obtain ALUC review of the impacts of its proposed PMP projects.</p> <ul style="list-style-type: none"> ○ In the Final PEIR, clarify the accurate relationship between the county and the ALUC. 	R-I24-59 cont.
			<ul style="list-style-type: none"> • The quoted language above also says: <i>“However, the marginal shift in RPZs would not render existing or approved land uses incompatible with an applicable ALUCP or constitute a hazard of existing or approved land uses incompatible with an applicable ALUCP or constitute a hazard to aviation.”</i> [Emphasis added.] <ul style="list-style-type: none"> ○ The quoted statement is misleading. Of course <i>“approved land uses will not be incompatible with an applicable ALUCP”</i> because the city of Carlsbad will not approve a land use that does not comply with ALUCP restrictions (such as number of employees permitted in a structure who might be hurt by a crashing aircraft.) ○ County’s statement implies that PMP projects will not adversely impact property owners adjacent to Palomar Airport. That may be true as to existing uses and buildings in place. It is not necessarily true as to empty land. This became abundantly clear when owners of property at the west end of the Palomar runway [Durkins] appeared before the Carlsbad Council a few months ago and noted that ALUC occupancy restrictions in the noise/safety zones resulting from Palomar use had caused them to lose more than \$1 million because an expensive office building constructed was now limited to low occupancy level uses and storage. ○ Moreover, RPZs are only the first of five areas relevant to analysis by the San Diego County Regional Airport Authority Land Use Committee (ALUC). The ALUC looks at five different noise and safety zones near Palomar Airport to determine how land use around the airport should be restricted. County’s PEIR fails to discuss how the PMP projects impact 	R-I24-60

			<p>the other four ALUC noise and safety zones.</p> <ul style="list-style-type: none"> • In the Final PEIR: <ul style="list-style-type: none"> ○ Identify (i) the property owners along the entire Palomar airport perimeter within 500 feet of the north and south sides of the airfield edges [mainly impacted by the requirement that certain areas had to be kept clear to avoid D-III aircraft using the runway and taxiways] and (ii) the property owners whose property lies within the areas of the revised RPZs and/or potentially within the ALUC revised McClellan-Palomar Land Use Compatibility Noise and Safety Zones at both ends of the extended and/or relocated Palomar runway. ○ Identify (i) the property owners who will be given actual notice of the impact of PMP projects on their property use and (ii) the county zoning and planning and land use provisions that require such notice. ○ Describe how extending the Palomar runway and/or shifting it north 120 feet impacts the other four ALUC-designated noise and safety zones, whose size varies with the size of Palomar and the size of aircraft using Palomar. 	<p>R-I24-60 cont.</p>
36	New County RPZ Figures (con'd)	County depiction of PMP Improvements and RPZs (con'd) – FIGURE 1-5	<ul style="list-style-type: none"> • BRR 48. Missing County RPZ Information Related to Presence or Absence of Retaining Walls. <ul style="list-style-type: none"> ○ Figure 1-5 shows the PMP Conceptual Development Phases. It does not show the location, size, or dimensions of the west runway \$13.7 million retaining wall, apparently part of the county's construction of a Runway 24 EMAS system. In the Final PEIR, add this information, which will be relevant in part to (i) determine the extent of destruction of biological habitat and to (ii) disclose county's intent related to construction of a 900-foot, rather than 800 foot, runway extension – which was beyond the scope of the PMP PEIR analysis. In other words, do county RPZ 	<p>R-I24-61</p>

			<p>diagram dimensions presume a west end EMAS ONLY WITH a retaining wall which would mean that county is adopting a plan for a 900-foot proposed runway rather than the maximum 800-foot alternative listed in the PEIR analysis, a CEQA violation.</p> <ul style="list-style-type: none"> ○ Also, Figure 1-5 does not show the location, dimensions, or size of the proposed county retaining wall along the southeast corner of the airport, which is relevant to the size and orientation of the RPZs. ○ Also, Figure 1-5 does not refer to the FAA relocation of navigation aids on the NORTHEAST CORNER OF ECR AND PAR, which will require modifications of the lease between the FAA and county and payment of about \$8.5 million in construction/installation cost (according to the PMP project executive summary). Recall that CEQA requires an assessment of all project impacts, direct and indirect, and county cannot operate extended runways and conversion to a D-III airport without the modification to the navigation lights and related equipment, which will in turn determine the correct RPZ area. ○ In the Final PEIR: <ul style="list-style-type: none"> ▪ Discuss all the issues listed above and ▪ Show the difference in the Palomar runway west end RPZs with and without the west end retaining wall. 	<p>R-I24-61 cont.</p> <p>R-I24-62</p> <p>R-I24-63</p>
37	New County RPZ Figures (con'd)	County depiction of PMP Improvements and RPZs (con'd) – FIGURE 4-1a	<ul style="list-style-type: none"> • BRR 49. County Figure 4-1 Deficiencies. <ul style="list-style-type: none"> ○ Revised Figure 4-1a is entitled “<i>B-II Enhanced Alternative.</i>” ○ Its “Legend” does not identify the meaning of the yellow lines. Presumably the land owned by the county. In the Final PEIR, correct 	R-I24-64

			the figure Legend to be complete.	R-I24-64 cont.
			<ul style="list-style-type: none"> ○ The Figure refers to a total runway extension of 900-feet [200-feet plus 700-feet]. County does NOT analyze the environmental impacts of this alternative in the PEIR, though county makes an occasional 900-foot reference. Since the PEIR must analyze all alternative projects, in the Final PEIR, correct Figure 4-1a to refer to a maximum of 800-foot runway extension. ○ If in the Final PEIR, county retains the 900-foot reference, provide sufficient detail in the Final PEIR for court review including all PEIR and PMP sections in which county analyzed environmental impacts of a 900-foot runway extension including the growth-inducing impacts of such an extension. Be consistent with what the FAA has said about growth impacts of lengthening runways. ○ The Figure [by its east runway red line projections] indicates an RSA for the B-II Enhanced runway but does NOT show an east end EMAS. The FAA Airport Design Manual [AC 150/5300-13A] requires either a 1000-foot RSA or 350-foot EMAS when the airport “critical design aircraft” are C and D aircraft with more than 500 annual airport operations – a fact county concedes.³⁰ If county extends the Palomar runway either 800 feet or 900 feet eastward, there is no room for an east end 1000-foot RSA. In the Final PEIR correct Figure 4-1b to indicate a B-II Enhanced runway east end EMAS instead of an RSA or explain (i) how county complies with the FAA Airport Design Manual and (ii) the FAA contact who has confirmed that the county using a Palomar runway east end RSA 	R-I24-65
				R-I24-66

³⁰ FAA has allowed county to operate as a B-II airport even though the actual current design aircraft is a C-III aircraft because county has been “grandfathered” in as an existing airport with an existing runway. Altering the runway invokes the current FAA requirements, which means either a 1000-foot east end Runway Safety Area or a 350-foot EMAS.

			<p>substantially shorter than 1000-feet for a 5800-foot runway handling 10,000 to 30,000 C and D aircraft annual meets FAA design requirements.³¹</p> <ul style="list-style-type: none"> ○ In the Final PEIR, explain how close a B-II Enhanced RSA end and/or EMAS end will be to the thousands of cars that transit El Camino Real daily. It appears a proper RSA end and/or EMAS end would be less than 200-feet from ECR traffic. Explain the added environmental and human risk to an aircraft crashing onto ECR. Also, explain what runway width county proposes and why. The FAA Design Manual does not require a B-II runway to have a 150-foot width. A standard 100-foot width would reduce the runway cost by a third. 	R-I24-66 cont.
38	New County RPZ Figures (con'd)	County depiction of PMP Improvements and RPZs (con'd) – FIGURE 4-1b	<ul style="list-style-type: none"> • BRR 50. Figure 4-1b General Deficiencies. <ul style="list-style-type: none"> ○ Revised Figure 4-1b. This figure, in four quadrants, shows different runway end scenarios and depicts existing RPZ areas. The size of RPZs varies with the size of aircraft using the airport. RPZs for B aircraft are smaller than RPZs for C and D aircraft. The existing and future critical design aircraft for Palomar are C and D aircraft. Palomar is now classified as a B-II airport but handles FAA rated C and D aircraft. ○ In the Final PEIR, <ul style="list-style-type: none"> ▪ (i) State whether the RPZ distances and areas shown in each of the four quadrants are based on B aircraft or C or D aircraft; ▪ (ii) State why county chose the distances and areas it did considering the inherent conflict of C and D aircraft using (aa) an existing B-II runway as contrasted with (bb) C and D aircraft 	R-I24-67

³¹ Notice that Figure 4-1a does not correctly depict the RSA [see red lines]. The red lines may be correct for a 200-foot runway extension. But they are not correct for a 900-foot [200 + 700-foot] runway extension. The Runway and Runway Safety Area may not overlap.

			<p>using an extended or relocated runway – which must meet the current FAA Airport Design requirements in AC 150/5300-13A.</p>	R-I24-67 cont.
			<ul style="list-style-type: none"> ○ Revised Figure 4-1b is deficient for at least two reasons. <ul style="list-style-type: none"> ▪ First, it has no scale so the dimensions depicted cannot be determined and compared against FAA requirements, which leads to the problem described immediately above. ▪ Second, the drawing is not superimposed over actual Carlsbad properties; nor is there an accompanying list of properties affected. So Carlsbad property owners are unable to determine if the existing or proposed RPZs impact their properties. Recall the county is fond of saying that property owners who buy near airports cannot complain about airport impacts. Complaints are justified when county prepares drawings, which do not sufficiently inform the owners of the airport impacts. 	R-I24-68
			<ul style="list-style-type: none"> ○ In the Final PEIR, correct the drawings to (i) add scales, (ii) superimpose the drawings over actual properties affected, (iii) add a list of properties affected, and (iv) state whether the RPZs drawn in each of the four quadrants are based on the FAA Design Requirements for B or C or D aircraft. 	R-I24-69
			<ul style="list-style-type: none"> • BRR 51. Figure 4-1b: Specific First Quadrant: West End Runway Deficiencies [B-II Enhanced Alternative RPZs. <ul style="list-style-type: none"> ○ Is the 1st Quadrant RPZ shown a departure RPZ [aircraft taking off only] or approach RPZ [aircraft arriving and landing]? Why aren't both shown? ○ Recall that Figure 4-1a [to which Figure 4-1b is linked] shows a West 	R-I24-70
				R-I24-71

			<p>End EMAS. When the West End EMAS is installed, there will be a buffer area between the EMAS and a relocated runway threshold to deter approaching aircraft from landing in the EMAS (which is designed for aircraft taking off only). This new runway threshold will require an adjusted Approach RPZ. Accordingly the existing and future approach RPZs will NOT be identical as Figure 4-1b, First Quadrant, suggests.</p> <ul style="list-style-type: none"> ○ In the Final PEIR, answer the questions above and provide the missing information with scales to show actual distances and actual Carlsbad properties affected. Understand that BOS adoption of the PMP places a cloud over and affects the economic value of properties affected. Accordingly, county needs to identify the specific properties. <ul style="list-style-type: none"> • BRR 52. Figure 4.1b: Second Quadrant: East End Runway: No Extension Deficiencies. <ul style="list-style-type: none"> ○ Is the RPZ shown a departure RPZ [aircraft taking off only] or approach RPZ [aircraft arriving and landing]? Why aren't both shown? Recall that Figure 4-1a [to which Figure 4-1b is linked] shows an East End Runway Safety area. ○ In the Final PEIR, answer the questions above and provide the missing information with scales to show actual distances and actual Carlsbad properties affected? Understand that BOS adoption of the PMP places a cloud over and affects the economic value of properties affected. Accordingly, county needs to identify the specific properties so the extent of (i) county's "constructive taking" of properties and (ii) needed aviation easements may be determined. • BRR 53. Figure 4.1b: Third Quadrant: East End 200-Foot Extension Deficiencies. 	<p>R-I24-71 cont.</p> <p>R-I24-72</p> <p>R-I24-73</p>
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			<ul style="list-style-type: none"> ○ Is the RPZ shown a departure RPZ [aircraft taking off only] or approach RPZ [aircraft arriving and landing]? Why aren't both shown? ○ Explain why the future [purple shaded] RPZ is smaller than the existing RPZ [blue marked area]. Just the opposite should be true as Palomar transitions to heavier, faster D aircraft that have more potential to create widely scattered damage on the ground in the event of a crash. ○ In the Final PEIR, answer the questions above and provide the missing information with scales to show actual distances and actual Carlsbad properties affected? Understand that BOS adoption of the PMP places a cloud over and affects the economic value of properties affected. Accordingly, county needs to identify the specific properties so the extent of county's (i) "constructive taking" of properties and (ii) needed aviation easements may be determined. <p>• <i>BRR 54. Figure 4.1b: Fourth Quadrant: East End 700-Foot Extension Added to Prior 200-Foot Extension Deficiencies.</i></p> <ul style="list-style-type: none"> ○ Is the RPZ shown a departure RPZ [aircraft taking off only] or approach RPZ [aircraft arriving and landing]? Why aren't both shown? ○ Recall that Figure 4-1b [to which Figure 4-1a is linked] shows an East End Runway Safety Area [red lines] rather than an EMAS. But after a 900-foot east end runway extension [200-foot increment plus 700-foot increment], there is no room for a 1000-foot RSA which the FAA Design guidelines require for a runway extension handling C and D aircraft. Accordingly, county must install an east end EMAS. When the East End EMAS is installed, there will be a buffer area between the EMAS and a relocated runway threshold to minimize approaching aircraft from landing in the EMAS (which is designed for aircraft taking off only). This new runway threshold will require an adjusted Approach RPZ.
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R-I24-73
cont.

R-I24-74

			<ul style="list-style-type: none"> Moreover, apart from the just-noted issues, county's Figure 4.1b, Fourth Quadrant, makes no sense. It shows exactly the same RPZ as Figure 4.1b, Third Quadrant, which involves only a 200-foot runway extension. The location of a 5100-foot runway RPZ and a 5800-foot runway RPZ can not be the same. In the Final PEIR, answer the questions above and provide the missing information with scales to show actual distances and actual Carlsbad properties affected? Understand that BOS adoption of the PMP places a cloud over and affects the economic value of properties affected. Accordingly, county needs to identify the specific properties. Explain why county believes a 5100-foot and 5800-foot RPZ can be located identically.³² Also, explain why a recirculation of the RPZ is not needed in view of the county's complete failure to provide meaningful RPZ information. Provide sufficient detail for court review. 	R-I24-74 cont.
39	New County RPZ Figures (con'd)	County depiction of PMP Improvements and RPZs (con'd) – FIGURES 4-2a & 4-2b re: D-III Full Compliance	<ul style="list-style-type: none"> BRR 55. In Table 4-1 entitled "<i>Comparison of Project Alternatives to Project Objectives</i>" of its March 2018 PEIR [see the reproduced table following Item 42 below], county lists multiple reasons why the D-III Full Compliance Alternative is not possible including financial feasibility. Accordingly, no useful purpose would be served by extensively pointing out the many defects in Figures 4-2a and 4-2b. Nevertheless, we incorporate by reference our questions and comments in BRR 51 to 54 for county response in its Final PEIR since the defects in Figures 4.2a & 4.2 b mirror the defects in Figure 4.1b. 	R-I24-75
40	New County RPZ Figures (con'd)	County depiction of PMP Improvements and RPZs (con'd) – FIGURES 4-3a & 4-	<ul style="list-style-type: none"> BRR 56. In Figures 4-3a and 4-3b, county refers to its "<i>D-III Modified Standards Alternative</i>" [which county's March 2018 PEIR Table 4-1 rejects because it fails to avoid impacts to airport businesses.] See Table 4-1 evaluation column 5. Accordingly, no useful purpose would be served by extensively pointing out the many defects in 	R-I24-76

³² It may be that a 5100-foot RPZ and 5800-foot RPZ have the same dimensions but the start and end of the RPZ would differ because aircraft take-off and land at different runway locations. Moreover, the required east end EMAS further adjusts the RPZ depending on whether an approach or departure RPZ is involved.

		3b re: D-III	Figures 4-3a and 4-3b. Nevertheless, we incorporate by reference our questions and comments in BRR 51 to 54 for county response in its Final PEIR since the defects in Figures 4.3a & 4.3b mirror the defects in Figure 4.1b. Also, in all of the quadrants that show moving the RPZ into adjacent areas impacting new property owners, identify the specific property owners impacted by address and location	R-I24-76 cont.
41	New County RPZ Figures (con'd)	County depiction of PMP Improvements and RPZs (con'd) – FIGURES 4-4a & 4-6b D-III On Property Alt	<ul style="list-style-type: none"> • BRR 57. In Table 4-1 entitled “<i>Comparison of Project Alternatives to Project Objectives</i>” of its March 2018 PEIR [see Table 4-1 following Item 42], county lists multiple reasons why the D-III On-Property Alternative is not possible including financial feasibility. Accordingly, no useful purpose would be served by pointing out the many defects in Figures 4-4a and 4-4b. Nevertheless, we incorporate by reference our questions and comments in BRR 51 to 54 for county response in its Final PEIR since the defects in Figures 4.4a & 4.4b mirror the defects in Figures 4.1b. 	R-I24-77
42	New County RPZ Figures (con'd)	County depiction of PMP Improvements and RPZs (con'd) – FIGURES 4-5a & 4-5b Alt Re:	<ul style="list-style-type: none"> • BRR 58. County refers to this alternative as the “C-III Modified Standards Compliance Alternative” and in Table 4-1 rejects it as unable to meet present and future demand. Figures 4-5a and 4-5b present interesting issues that county needs to address in its Final PEIR as follows: <ul style="list-style-type: none"> ○ As to Figure 4-5a showing county’s <i>C-III Modified Standards Compliance Alternative</i>, it shows an EMAS at each end but no dimensions. Prior county figures [4-2a, 4-3a, and 4-4a] referred to 350-foot EMASs. ▪ We understand that the current FAA design requirement for a new runway that (i) handles C and/or D aircraft and (ii) eliminates the standard 1000-foot Runway Safety area at the end of the runway is 600-feet. Either county knows this and intentionally failed to put a dimension on the Figure 4-5a EMAS or county is uncertain how to proceed. ▪ IF FAA requirements say county must install a 600-foot EMAS at both the Palomar west end and east end runway, then county does 	R-I24-78

			<p>not have a sufficient area to create even an 800-foot runway extension.</p> <ul style="list-style-type: none"> ▪ Accordingly ALL county RPEIR RPZs are likely incorrect for two reasons: <ul style="list-style-type: none"> • First, a 600-foot EMAS rather than a 350-foot EMAS alters the actual, physical runway end and hence the RPZs. • Second, either a 600-foot or 350-foot EMAS, likely requires a buffer area between the inner EMAS end and the designated landing threshold – as indicated by a displaced threshold. <p>○ In the Final PEIR, address the issues noted above and:</p> <ul style="list-style-type: none"> ▪ Cite the current FAA length requirement for airports building new runways to handle C and/or D aircraft and the FAA Advisory Circular or Order or other document imposing the requirement and the relevant paragraphs. ▪ State the actual land area available west to east without adding retaining walls that county has available to construct a new runway if county moves the runway 75 feet to 110 feet to the north. ▪ State the additional land area that county creates by adding its proposed Palomar west end retaining wall and backfills it with dirt. ▪ Provide a revised Figure 4-5a [or add a Figure 4-5aa] showing (i) the runway length county could achieve if the FAA requires county to add a 600-foot EMAS at each runway end and (ii) how the approach and departure RZAs change under this scenario. 	<p>R-124-78 cont.</p> <p>R-124-79</p>
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		<ul style="list-style-type: none"> • BRR 59. Figure 4-5b First Quadrant. West end runway shifts 123 feet north, no runway extension. In the Final PEIR, identify the specific property owners impacted by the shifted RPZ by address and location. Identify how the runway shift will also alter the SDRAA Airport Land Use Commission restrictions on Carlsbad property owners in the 5 safety and noise zones impacted by the length, location, and orientation of a new Palomar runway. 	R-I24-80
		<ul style="list-style-type: none"> • BRR 60. Figure 4-5b. Second Quadrant. East End: Runway shifts 123 feet north; no runway extension. <ul style="list-style-type: none"> ○ In the Final PEIR, identify the specific property owners impacted by the shifted RPZ by address and location. Identify how the runway shift will also alter the SDRAA Airport Land Use Commission restrictions on Carlsbad property owners in the 5 safety and noise zones impacted by the length, location, and orientation of a new Palomar runway. ○ In the Final PEIR, explain why the existing and future RPZ are displaced from the yellow landing threshold. 	R-I24-81
		<ul style="list-style-type: none"> • BRR 61. Figure 4-5b. Third Quadrant. East End: 200-foot runway extension with 200-foot shift in Landing Threshold. <ul style="list-style-type: none"> ○ In the Final PEIR, identify the specific property owners impacted by the shifted RPZ by address and location. Identify how the runway shift will also alter the SDRAA Airport Land Use Commission restrictions on Carlsbad property owners in the 5 safety and noise zones impacted by the length, location, and orientation of a new Palomar runway. 	R-I24-82
		<ul style="list-style-type: none"> • BRR 62. Figure 4-5b. Fourth Quadrant. East End: 600-foot runway extension [after initial 200-foot runway extension as indicated by light green extension in Figure 4-5a] with 370-foot shift in Landing Threshold. <ul style="list-style-type: none"> ○ In the Final PEIR, identify the specific property owners impacted by the 	R-I24-83

			<p>shifted RPZ by address and location. Identify how the runway shift will also alter the SDRAA Airport Land Use Commission restrictions on Carlsbad property owners in the 5 safety and noise zones impacted by the length, location, and orientation of a new Palomar runway.</p> <ul style="list-style-type: none"> ○ Figure 4-5b shows a 370-foot runway landing threshold shift. Figure 4-5a (to which 5b relates) shows a Palomar runway east end EMAS but does not specify whether it is 350 feet, 600 feet, or other dimension. For reasons above, it appears a 600-foot EMAS is required. Explain in the Final PEIR (i) the how the size of the 370 foot shifted east end threshold was determined, (ii) whether the shift is based in part on an EMAS install, (iii) if so, the size of the EMAS assumed, and (iv) the actual length of the Palomar runway available to aircraft landing east to west after the landing threshold is displaced 370-feet. ○ Explain in the Final PEIR why the future RPZ [purple area] in Figure 4-5b (as well as in some other figures) is not a regular shaped trapezoid. The two outermost RPZs are “indented.” How and why were those indents determined. The issue is important because as depicted in Figure 4-5b, one or more buildings may be in the RPZ if the indents are incorrectly calculated.

R-I24-83
cont.

R-I24-84

R-I24-85

Chapter 4 Alternatives								
Table 4-1. Comparison of Project Alternatives to Project Objectives								
Project Objective (Section 1.1)	Proposed Project (D-41 Modified Standards Compliance Alternative)	No Project	B-4 Enhanced Alternative	D-41 Full Compliance Alternative	D-41 Modified Standards Alternative	D-41 On Property Alternative	C-41 Modified Standards Compliance Alternative	Public Comment Alternative
1) Safety – The preferred alternative must preserve and/or enhance the safety of Airport users. Airport users include passengers, pilots, Airport staff, tenants, and other operators. Safety criteria encompasses FAA airport design standards, State and local regulations, and account for the operational functionality of aircraft and Airport users.	☑	☑	☑	☑	☑	☑	☑	☑
2) Financial Feasibility – The preferred development alternative must address the near and long-term Airport needs in a manner that is financially achievable, financially responsible, and environmentally and operationally sustainable.	☑	☑	☑	✗	☑	✗	☑	☑
3) Avoid Impacts to Airport Businesses – Avoid operational or physical changes to airport tenants or leaseholds in order to avoid disruptions to airport businesses.	☑	☑	☑	☑	✗	✗	☑	☑
4) Ability to Accommodate Existing and Future Demand – Forecasts of aviation-related demand have been developed for this Airport Master Plan Update. These forecasts are used as a gauge to determine what Airport improvements will be required to maintain or expand service at the Airport and at what point in time improvements should be implemented. The preferred alternative should be able to accommodate projected levels of aviation demand as warranted.	☑	✗	✗	☑	☑	☑	✗	✗
5) Ability of Facility Improvements to Remain on Airport-owned Property – Despite existing physical constraints at the airport, it is desirable to keep all facility improvements within the existing airport landscape. This minimizes project cost and the potential for environmental and land use impacts.	☑	☑	☑	✗	☑	☑	☑	☑
6) Environmental Impacts – A goal of recommended alternatives is to minimize impacts to the environment. This includes on-Airport and off-airport impacts.	☑	☑	☑	✗	☑	☑	☑	☑
McClellan-Palomar Airport Master Plan Draft PEIR								
Page 4-17 January 2018								
Chapter 4 Alternatives								
Project Objective (Section 1.1)	Proposed Project (D-41 Modified Standards Compliance Alternative)	No Project	B-4 Enhanced Alternative	D-41 Full Compliance Alternative	D-41 Modified Standards Alternative	D-41 On Property Alternative	C-41 Modified Standards Compliance Alternative	Public Comment Alternative
7) Offsite Impacts to Surrounding Airport, including Businesses and Residents – Major reconstruction of existing businesses, infrastructure, and transportation systems can have significant impacts on an airport and the surrounding area. Such projects add cost, impact operations, capacity, and can have unintended environmental impacts. The preferred alternative should minimize changes to the surrounding community and infrastructure.	☑	☑	☑	✗	☑	☑	☑	☑
8) Eligibility for FAA Funding – Proposed improvements should adhere to FAA design criteria and be financially reasonable in order to be eligible for FAA grant funding for design and construction.	☑	✗	☑	☑	☑	☑	☑	☑
☑ denotes alternative meets objective ✗ denotes alternative does not meet objective Note: as explained in Chapter 4 of this PEIR, some of the project alternatives would achieve different airport classifications (i.e., B-4, C-41, D-41). As such, this table analyzes whether the project objectives would be met for each alternative's respective airport classification.								

R-124-86

43	New County RPZ Figures (con'd)	County depiction of PMP Improvements and RPZs (con'd) – FIGURES 4-6a & 4-6b Alt Re:	<ul style="list-style-type: none"> County's Table 4-1 in its March PEIR (see reproduction above) concedes that the "Public Alternative" meets all 8 of the county evaluation criteria except county says it won't accommodate existing and future aircraft. <ul style="list-style-type: none"> The Public Alternative simply shifts the existing runway and taxiway north 123 feet and east 300 feet. This alternative: <ul style="list-style-type: none"> (i) allows county to install a west end EMAS without constructing a massive \$13.7 million retaining wall; (ii) allows county to preserve an east end standard 1000-foot Runway Safety Area, thereby avoiding the cost of a \$12 million east end EMAS; (iii) allows county to continue to handle all the C and D aircraft county has handled for the last twenty years (about 12% of Palomar annual operations); (iv) allows Palomar operations to grow substantially since Palomar in the 1990s handled about 286,000 annual operations and now operates at 30% under capacity handling only about 155,000 operations annually; (v) reduces the county's cost from \$110 million to less than \$50 million;³³ (v) reduces the county CEQA biological impacts [fewer species and less species habitat disturbed and navigation light relocation minimized]; air quality impacts [fewer pollutant and Greenhouse Gas Emissions resulting from no need to place hundreds of pilings through the landfill]; water quality impacts [avoids hundreds of holes migrating 30 years of landfill contaminated
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R-124-87

³³ Cost savings include: (i) no runway west end \$13.7 million retaining wall, (ii) no runway east end \$12 million EMAS, and (iii) no expense of driving several hundred pilings 20 to 50 feet through trash to create grade beams supporting a runway extension.

			<p>garbage juice to clean soils and ground waters under the landfill]; and traffic impacts [by emphasizing the airport general aviation uses that county promised in Carlsbad Conditional Use Permit 172];</p> <ul style="list-style-type: none"> ▪ (vi) improves Palomar Airport safety for FAA-rated C and D aircraft by installing a runway west end EMAS and assuring a standard east end 1000-foot standard FAA Runway Safety Area <ul style="list-style-type: none"> ○ County claims in Table 4-1 that a relocated runway will not meet future Palomar needs. But county's documents forecast only 208,000 annual future operations within 20 years, far less than the 286,000 previously handled. ○ County also claims that one tenant who flies to China, making only about 500 annual flights per years [less than ½ of 1 percent of Palomar operations], would have to continue to refuel at Lindbergh if the Palomar runway is not extended. That is true. But it is also true that extending the runway to even 5800 feet would not allow China flights without refueling do go Gulfstream range limits and fuel safety limits. <ul style="list-style-type: none"> • Given all the advantages above, county needs to assure that its Public Comment RPZ figures are understandable and accurate. They are not for the below reasons: <ul style="list-style-type: none"> ○ The Figure 4-6a diagram Legend does not fully explain Palomar changes. For instance, the Legend refers to "Removed Pavement" in a light solid yellow color. Yet there is no corresponding solid light yellow color in the drawing. There are substantial cross-hatched yellow areas that might be pavement removal but no corresponding item in the Legend. ○ Also, Figure 4-6a refers to a 400-foot centerline separation between the runway and taxiway. Such a 400-foot separation is an FAA D-III 	<p>R-I24-87 cont.</p> <p>R-I24-88</p> <p>R-I24-89</p>
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			<p>requirement, not an FAA B-II requirement and should be deleted from the figure.</p> <ul style="list-style-type: none"> ○ The Figure 4.6a Legend confusingly refers to the “existing RPZ” in blue and to the purple relocated as RPZ as “area of runway protection zone.” In contrast, earlier drawings refer to purple areas as ‘areas of future runway protection zones.’ • As in other RPZ drawings, county in Figure 4.6b shows smaller RPZs (purple) than the existing RPZs (blue) and fails to distinguish between approach RPZs and departure RPZs. • In the Final PEIR, address the above issues and recirculate understandable approach and departure drawings so the businesses immediately adjacent to the airport can know which businesses are being restricted. 	<p>↑ R-I24-89</p> <p>R-I24-90</p> <p>R-I24-91</p> <p>R-I24-92</p>
			Table End But See Attachments A [Transcript of Horn December 16, 2016 comments] & B [New FAA Reauthorization Act Requirements for FAA and Airport Sponsors]	R-I24-93

Attachment A to Bender August 6, 2018 Comments on County June 2018 Recirculation of

**Comment Letter R-I24
Exhibit**

Parts of its Palomar Airport Master Plan Programmatic EIR
Transcript of Supervisor Horn December 16, 2015 Board of Supervisor Meeting Statement

Indicating

- His Prejudgment of the Palomar Master Plan Project Alternatives Before Any Environmental Analysis;
- His Desire to Build a 900-Foot, Not the Consultant Recommended 800-Foot Runway Extension;
- His Desire to Substitute Larger, Faster FAA-Rated C & D Aircraft for FAA-Rated A & B Aircraft to Displace the Palomar 130,000 [out of 155,000] Annual General Aviation Recreational Flyers

Comment Letter R-I24
Exhibit

Board of Supervisors Meeting Dec 16, 2015, 9am

Agenda item #3 - Options for New Master Plan for McClellan-Palomar Airport

http://sdcounity.granicus.com/MediaPlayer.php?view_id=98&clip_id=1709

Spoken by Bill Horn

"I think this is a big huge commercial driver here. And I think we're planning an airport for, if not 50 years maybe 100. Um, so I'm a private pilot, I'm sympathetic to airplane owners but I think the folks that are tied down on the North side of the runway need to move to Fallbrook or someplace else. You have a huge commercial operations going here with a lot of corporate jets coming in and out of there. This is the driver, this is the impetus for us lengthening the runway and doing all these safety issues there. It's no longer a little small airport um, that you can fly in and out of with your Cessna 210 um, so I think that those folks need to be put on notice that they're going to have to move 'cause you're going to have to have that space and you're not going to be able to move them to the fixed space operator space. I mean you're cutting back on their businesses so um, the purpose of this whole thing was to examine the economic feasibility of expanding and increasing activity.

I think the concerns of the public as you have these meetings of course, are going to be noise, but if we expand the runway um, that noise will be a lot less because that footprint will go way down um, and so, and I know your alternatives here, you're basically looking at the 800 ft. I would like you to also, because I'm concerned about if we, I want you to also leave the 900 ft in your study because I don't want to have to come back and sit down and decide if we got the money from the Feds to build 900 ft and then all the sudden, we don't, we haven't studied it so I don't want to have to go through that again. So I realize your preferred and we're going to probably approve going ahead with your preferred and but I just want to make sure we haven't eliminated the 900 ft, and a couple of other issues. I know you guys are nice to the pilots and I appreciate that. I don't want them down here picketing us but at the same time, as a private pilot, I think that maybe you ought to move, we ought to move, some of these planes or make

**Comment Letter R-I24
Exhibit**

an opportunity for them to move to either Fallbrook or Borrego or I don't know. I know French Valley is in Riverside County and they would probably like the aircraft also. I just think the days of a the majority of this activity being recreational are over um, and so this is a very, very viable commercial operation so we are planning for the next 50 years, if not 100. So I want us to keep all the options available.

With that being said, we can go to speakers or staff or whatever. I just don't want to narrow this down to a focus groups input 'cause I don't know what their concern is. My concern is the economic viability of this airport and the Northern Region and very obviously, if you look at Lindberg, you know they're pretty much at capacity. I know Greg can talk to us about that but uh, I think we have a great option here and I think we ought to use it. So with that said, having ruined the whole soup mix you go ahead."

**Comment Letter R-I24
Exhibit**

**Attachment B to Bender August 6, 2018 Comments on County's Recirculated PEIR Sections:
2018 Proposed FAA Reauthorization Act to Replace The Consolidated Appropriations Act of 2018 expiring September 30,
2018**

Comment Letter R-I24
ExhibitDRAFT
6/25/18

[Add to S.1405]

Amendment to Federal Administration

Reauthorization Act of 2018 Proposed New Section [4119]

- (1) **The Amendment.** This draft amendment adds a new Section to Title IV of the proposed FAA Reauthorization Act of 2018. ("FRA"). The FRA would extend FAA budgetary authorization through FY [2021].
- (2) **Purpose.** This amendment addresses overflight noise and pollution impacts on communities surrounding commercial airports resulting from Next Generation Air Transportation System ("NextGen") concentrated and low-altitude flight paths and airspace redesign.
- (3) **Background.** Using NextGen satellite Performance Based Navigation technology, the FAA has implemented at commercial airports its modernized aircraft guidance system. This includes its Wide Area Augmentation System (WAAS) enabling area navigation (RNAV) utilizing global positioning system (GPS) technology, including Required Navigational Performance guidance. Dates of implementation of NextGen WAAS-RNAV-GPS technology vary by airport and runway following NextGen rollout in 2007 with significant implementation in 2011 and thereafter.
- (4) **The Problem.** NextGen's employment of satellite-based technology comprising Wide Area Augmentation System (WAAS) enabled Area Navigation (RNAV) Global

Draft (6/25/18) Amendment to Federal Administration Reauthorization Act of 2018 Proposed New Section [4119]

Comment Letter R-I24
ExhibitDRAFT
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Draft (6/25/18) Amendment to Federal Administration Reauthorization Act of 2018 Proposed New Section [4119]

**Comment Letter R-124
Exhibit**

Comment Letter R-I24
ExhibitDRAFT
6/25/18

[Add to S.1405]

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**Comment Letter R-124
Exhibit**

Comment Letter R-I24
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Draft (6/25/18) Amendment to Federal Administration Reauthorization Act of 2018 Proposed New Section [4119]

**Comment Letter R-124
Exhibit**

Response to Letter R-I24**Ray and Ellen Bender**

R-I24-1 This comment includes introductory remarks regarding the commenter's letter. The County acknowledges this comment, and the individual comments are further addressed below. No further response is required.

R-I24-2 In accordance with State CEQA Guidelines Section 15125, the PEIR's environmental analysis is based on the physical conditions and regulatory framework at the time of the published Notice of Preparation. Proposed or other draft operating procedures not applicable to the Master Plan Update were not included in the PEIR. Actual data of airport operations, fleet mix, and flight tracks for a full calendar year (2016) were used to disclose and analyze existing aircraft operations for the Airport. No further response is required. Furthermore, the comment does not provide input related to the recirculated PEIR subjects. No further response is required.

Regarding the commenter's concern of aircraft noise, County staff researched the location provided by this comment and confirmed the location is outside of the 65dB contour (i.e., less than 65dB) under all scenarios. Specifically, the existing noise condition at the location provided was estimated to be 40.40dB, and its future condition without the Proposed Project is estimated to be 42.21dB. Assuming full implementation of the Proposed Project (PAL 2), the estimated future noise condition would be 42.42dB. This is below the threshold of significance of 65dB CNEL. Although the comment pertains to existing noise conditions, there is no evidence the Proposed Project would result in significant noise impacts. Therefore, because the location would be outside of the 65dB contour, no significant noise impacts would occur, and no changes to the PEIR are required. Please refer to Master Responses 1 and 4 in addition to PEIR Appendix D for more information about the supplemental noise analysis conducted for additional locations.

R-I24-3 Proposed improvements at the Airport as discussed in the Master Plan Update are based on long-term aviation forecasts (see Section 3 of the Master Plan Update) to define facility requirements as the Airport enters the next 20-year planning period. When the Master Plan Update was developed, 2016 provided the most up-to-date information regarding Airport operations. There have been no considerable changes in Airport operations since 2016. The 20-year planning period from 2016 to 2036 will be relied upon for the Master Plan Update, but the improvements can be implemented with flexibility of timeframes, and in response to actual Airport needs, and in coordination with FAA. Furthermore, the comment does not provide input related to the recirculated PEIR subjects. No further response is required.

R-I24-4 See Final PEIR Section 3.1.7.1.2 Relevant Policies, Ordinance, and Adopted Plan regarding consistency with applicable planning documents. Furthermore, the comment does not provide input related to the recirculated PEIR subjects. No further response is required.

R-I24-5 As discussed in the Reader's Guide to the recirculated portions of the Draft PEIR, the FAA is the owner and responsible agency for all aspects of the Airport's navigational aid lighting system (i.e., layout and placement of the structures according to FAA design standards, lighting system ownership, maintenance, etc.). This includes the existing MALSR lighting system that is located on the active airfield as well as on the adjacent County-owned parcel located east of El Camino Real (referred to as Eastern Parcel). The MALSR is a system of lights that provides pilots with navigational assistance as they

approach the Airport and the associated runway. As explained in the recirculated portions of the Draft PEIR, it is reasonably foreseeable that if the runway is shifted to the north as proposed in the Master Plan Update, a corresponding shift in the navigational aid lighting system would be needed, including the existing MALSR and associated access road located on the Eastern Parcel. If the runway is extended an additional 200 feet in its current alignment, an additional concrete pad and lighting structure would be installed 200 feet east of the existing lighting in line with the existing access road along the MALSR's current location.

The FAA's decision to shift or relocate the navigational aid lighting system, including the MALSR located on the Eastern Parcel, would be considered a federal action. The FAA has an existing land lease with the County for the current MALSR system on the Eastern Parcel, and FAA has the ability to manage the lighting system as it deems necessary for Airport safety. No changes have been made to the PEIR.

- R-I24-6** See **Response to Comment R-I24-5**. Also, the Draft PEIR Section 1.2.1.3 does identify the anticipated MALSR relocation as part of the project description. Nonetheless, as discussed in the Reader's Guide to the recirculated portions of the Draft PEIR, the project description was revised to include the MALSR relocation. Also see the Final PEIR Chapter 1. Potential impacts associated with the MALSR were included in the recirculated PEIR Section 2.2. See Figure 2.2-3b for a graphical depiction of the MALSR relocation that was included in the environmental analysis pursuant to CEQA. Furthermore, as described in the PEIR, the Master Plan Update is a long-term planning document, and the exact scope, scale, and timing for implementation of each proposed element are not yet defined because project-specific information has not been fully developed to quantify exact impacts. Therefore, environmental impacts for each element, and the Master Plan Update as a whole, are analyzed at a programmatic level for the purpose of environmental analysis. For information on how the Master Plan Update may indirectly impact biological resources including lighting and noise, see the Final PEIR Section 2.2.1.7 (Indirect Impacts) and PEIR Appendix B - Biological Technical Report.
- R-I24-7** The County currently maintains a Wildlife Hazard Management Plan for the Airport, which was developed to identify, manage, and reduce the risks that wildlife pose to aircraft operations. The Proposed Project does not propose any changes to the Wildlife Hazard Management Plan since it is an existing plan that would continue to be utilized at the Airport regardless of the Proposed Project. It is also noted that the specifications pertaining to FAA navigational lighting are strictly a federal action. Furthermore, this comment does not pertain to the adequacy of the PEIR. Therefore, no changes to the PEIR have been made in response to this comment.
- R-I24-8** This comment includes introductory remarks not applicable to the Master Plan Update or PEIR. Regarding the Draft NC MSCP, as of October 2018, the Draft NC MSCP has not been adopted or approved. PEIR Section 2.2 Biological Resources discusses the Draft NC MSCP designations for the Airport and Eastern Parcel, and the PEIR mitigation measures are written to allow for either the use provisions in the Draft NC MSCP (if adopted at the time of project construction), or the use of County Guidelines if the Draft NC MSCP has not been adopted. Mitigation measures are binding in accordance with the findings included in the Final PEIR as certified by the County Board of Supervisors.
- R-I24-9** The recirculated PEIR Section 2.2 Biological Resources disclosed the habitat and species that could potentially be affected by the Proposed Project located on the Airport (i.e., active airfield) and Eastern Parcel (i.e., MALSR footprint). For more detailed information, please refer to the Biological Technical Report Addendum that was published with the recirculated PEIR Section 2.2, which includes an inventory of

biological resources pertinent to the Proposed Project. Also refer to the Final PEIR Figure 2.2-3b for a graphical depiction of potential impacts to biological resources on the Eastern Parcel.

- R-I24-10** Although this comment cites the regulatory setting of the recirculated PEIR Section 2.2 Biological Resources, the comment does not raise an issue concerning the analysis or adequacy of the PEIR pursuant to CEQA Guidelines Section 15088. See Final PEIR Section 3.1.7 for a discussion of the regulatory land use and planning framework as it pertains to ongoing operation of the Airport.
- R-I24-11** The PEIR Section 2.2 Biological Resources includes a characterization of raptor foraging habitat around the Proposed Project site (see technical information provided in PEIR Appendix B Biological Technical Report). Table 1 of the Biological Technical Report also includes a list and date of biological surveys that have occurred in and around the Airport, including a year-long assessment of wildlife use, including raptors, at the Airport associated with the Wildlife Hazard Management Plan, which is included as Appendix I to the Biological Technical Report. Furthermore, relocation of the existing MALSR navigation lighting system by approximately 123 feet to the north of the current location was analyzed for potential impacts to wildlife movement on page 8 of 12 in the Biological Technical Report Addendum dated May 31, 2018. No new significant impacts would occur as a result. No changes have been made to the PEIR.
- R-I24-12** As discussed in the Reader's Guide to the recirculated portions of the Draft PEIR, the FAA is the owner and responsible agency for all aspects of the Airport's navigational aid lighting system (i.e., layout and placement of the structures according to FAA design standards, lighting system ownership, maintenance, etc.). This includes the existing MALSR lighting system that is located on the active airfield as well as on the adjacent County-owned parcel located east of El Camino Real (referred to as Eastern Parcel). A conceptual layout of the MALSR relocation is depicted in Figure 2.2-3b and includes footings for the light structures and alignment of the proposed gravel access road for FAA to maintain the navigational lighting system.
- R-I24-13** As this comment includes a request for information, it does not specifically identify an environmental issue with the PEIR analysis or proposed mitigation. Therefore, no changes to the PEIR have been made in response to this comment, and no further response is required. This comment is included in the Final PEIR for review and consideration by the County Board of Supervisors prior to a final decision on the Proposed Project.
- R-I24-14** The Master Plan Update Section 5.5 Airfield Alternatives, Section 5.6 Airplane Design Group II Airfield Alternatives, and Section 5.7 Airplane Design Group III Airfield Alternatives include graphical depictions of each project alternative. These figures show the conceptual location and extent of runway surfaces. Once project-specific elements of the Master Plan Update are funded, designed, and proposed, the potential impacts will be further analyzed at the project-level. Furthermore, the Master Plan Update identifies that due to topography on the western side of the runway, a retaining wall may be necessary to support the installation of EMAS directly adjacent to the runway end. The Proposed Project includes the EMAS on the runway's western end, and PEIR Figure 2.2.-3a identifies the potential impacts to biological resources. Mitigation measures for biological resources identified in the PEIR would reduce project impacts below a level of significance. No changes have been made to the PEIR in response to this comment.

- R-I24-15** This comment states that preservation is not an allowable mitigation method. The County disagrees with this comment. The County has previously worked with the wildlife agencies (USFWS and CDFW) to identify suitable mitigation, and preservation of habitat that is not already protected is an acceptable method of mitigation. No changes were made to the PEIR in response to this comment.
- R-I24-16** See **Response to Comment R-I24-5**. Furthermore, as noted in the PEIR, the Master Plan Update is a long-term planning document, and the exact scope, scale, and timing for implementation of each project-specific element will be determined once funding is identified for project design engineering and construction. For the MALSR navigation lighting system, further coordination with FAA would be required since FAA is the owner and responsible agency for all aspects of the Airport's navigation lighting system. No changes have been made to the PEIR in response to this comment, and no further response is required.
- R-I24-17** The County disagrees with this comment that GHG emissions were not disclosed for aircraft operations, vehicle operations, or construction operations. Specifically, please refer to Tables 3.1.5-8 and 3.1.5-9 (of the recirculated PEIR Section 3.1.5), which identify the quantified GHG emissions associated with PAL 1 and PAL 2, respectively, for full implementation of the Master Plan Update in 2036. Also, Table 3.1.5-1 identifies the quantified GHG emissions under existing (2016) conditions, and Table 3.1.5-3 identifies the quantified GHG emissions associated with construction. Motor vehicle emissions are specifically identified in the aforementioned tables. Furthermore, the Airport is identified in the Regional Aviation Strategic Plan as providing commercial airline services to accommodate demand that cannot be met at the San Diego International Airport through Master Plan Update planning period. As a result, implementation of the Master Plan Update would support the goals of SANDAG's San Diego Forward by providing airline services for residents in northern San Diego County; thus, reducing the average travel distance of privately owned vehicles accessing aviation facilities, such as San Diego International Airport, Orange County International Airport, or Los Angeles International Airport. Regarding the offset of GHG emissions, the County disagrees that purchasing GHG credits is required. The PEIR identifies that the Proposed Project would result in less than significant impacts from GHG emissions and, accordingly, no mitigation is required.
- R-I24-18** As noted in the GHG Analysis Memorandum published with the recirculated PEIR Section 3.1.5, the memo was prepared to supplement (not replace) the original Climate Change Technical Report. All of the GHG emissions that were modeled and calculated to occur as a result of the Proposed Project remain valid and unaltered. As noted in the recirculated documents, a revised threshold of significance was identified. No changes have been made in response to this comment.
- R-I24-19** This comment includes introductory remarks. It does not raise a specific issues regarding the content of the PEIR, and it will be included as part of the administrative record. Additional comments and the County's associated responses are provided below.
- R-I24-20** CEQA Guidelines require the analysis of project impacts, in which a project is a defined as a discretionary action by a lead agency. The Master Plan Update's 20-year planning period as described in the PEIR only applies to McClellan-Palomar Airport, and there are no discretionary actions occurring at other County-owned airports as part of the project. Therefore, no other airports are included with the Proposed Project. Additionally, the movement of aircraft between airports within San Diego County is part of ongoing operations under existing conditions. Analysis of aircraft emissions specifically

attributable to the Master Plan Update are included in the PEIR emissions modeling calculations.

Furthermore, as stated in the PEIR, aviation-related GHG emissions are not included in the statewide Scoping Plan and the associated emissions reduction goals under the Global Solutions Act of 2006, also known as AB 32 (2006) and SB 32 (2016). Therefore, aviation-related GHG emissions would have no effect on the state's ability to achieve the goals as defined in the Scoping Plan, and the GHG emissions for aviation sources would not exceed applicable thresholds. No changes have been made to the PEIR in response to this comment.

- R-I24-21** The comment questions whether GHG emissions were calculated for vehicular trips associated with non-commercial aircraft operations. As noted in **Response to Comments L3-70 and L3-82**, and **Master Response 7**, aircraft in flight are under the jurisdiction and regulatory enforcement of FAA. As such, the County does not have the regulatory ability to place restrictions on Airport users or mitigate ongoing aircraft at a public-use airport. The purpose of the PEIR is to review impacts related to the Master Plan Update improvements to County facilities; not to inventory and assess uses of private leaseholds or tenants outside of the County's control. Attributing such ongoing operational emissions to the Proposed Project would be misleading and uninformative. As ground-facility manager, the County issues leases for commercial service. Furthermore, the County maintains that it has no regulatory ability to restrict or otherwise prevent use of this public-use airport by non-commercial aviation activity, including but not limited to general aviation, military, or charter flights. Therefore, impacts were analyzed only for commercial airline service (under PAL 1 and PAL 2 forecasts) because the County has discretion over the approval of commercial air service leases. No changes have been made to the PEIR in response to this comment.
- R-I24-22** The comment asks the County to explain why extending the runway to serve more, larger aircraft carrying significantly more fuel furthers California's GHG intent and goals. For a discussion of how the Proposed Project complies with the California's Scoping Plan and related goals, please refer to **Response to Comment R-I24-20** as well as the previously recirculated PEIR Section 3.1.5 (page 3-57). The comment also questions why GHG mitigation measures are not included. As noted in **Response to Comment R-I24-17**, the PEIR identifies that the Proposed Project would result in less than significant impacts from GHG emissions and, accordingly, no mitigation is required. No changes have been made to the PEIR in response to this comment.
- R-I24-23** The comment proposes operational constraints of aircraft using the runway/taxiway facilities to reduce GHG emissions. The PEIR was prepared to analyze potential environmental impacts associated with implementation of the Master Plan Update, and it would be inappropriate for the PEIR to speculate conditions described by the commenter since the County has no regulatory ability to restrict or otherwise prevent use of this public-use Airport. Please also refer to **Master Response 7**. As such, the County acknowledges this comment, but it does not raise an issue concerning the analysis or adequacy of the PEIR pursuant to CEQA Guidelines Section 15088. No changes have been made to the PEIR in response to this comment.
- R-I24-24** The County's methodology and revised significant threshold were published with the recirculated PEIR Section 3.1.5. The published documents identify the regulatory framework that guided and informed the revised GHG significance threshold. After including and explaining a more project-specific service population unique to the Airport service area, the County determined impacts would be less than significant with no mitigation required. The comment does not raise a specific issue concerning the analysis

or adequacy of the PEIR. Therefore, no changes have been made to the PEIR in response to this comment.

R-I24-25 The comment requests an explanation on how other airports in the region analyze GHG emissions. As this comment includes a request for information, it does not specifically identify an environmental issue with the PEIR analysis. Nonetheless, CEQA Guidelines Section 15064.4 gives each lead agency the affirmative duty to develop its own GHG methodologies and thresholds for each regardless of project type. Accordingly, in its independent evaluation and as explained in the published GHG Analysis Memo, the County determined the revised thresholds in the recirculated PEIR Section 3.1.5 help the County meet its share of the state's emissions reduction requirements, and is supported by substantial evidence. Regarding other County airports, this topic was previously raised by the commenter and addressed in **Response to Comment R-I24-20**. No changes have been made to the PEIR in response to this comment.

R-I24-26 The comment asks the County to explain how it interprets California Executive Order B-30-15. As this comment includes a request for information, it does not specifically identify an environmental issue with the PEIR analysis, and no further response is required.

Because California Executive Order B-30-15 set a 2030 target to achieve 40 percent reduction below 1990 levels, the comment further asks how many aircraft operations the County will analyze for its 1990 and 2030 conditions. However, the comment incorrectly assumes that each project must consider its emissions against historic conditions. Rather, the California Air Resources Board (CARB) recommended a 2030 per capita target for the state in the 2017 Scoping Plan, and it has specifically stated that the reduction provided directly correlates to the state's overall 40 percent reduction in GHG emissions from 1990 levels by 2030. In other words, by demonstrating a project's compliance with the 2017 Scoping Plan, it can be concluded that a project would not impede the goals of California Executive Order B-30-15. Please refer to the recirculated PEIR Section 3.1.5, which demonstrates that the Proposed Project would not conflict with the 2017 Scoping Plan or County's CAP; thereby not conflict with California Executive Order B-30-15. No changes have been made to the PEIR in response to this comment.

R-I24-27 As explained in the recirculated PEIR Section 3.1.5, the Proposed Project would result in less than significant impacts, and no mitigation is required. However, as documented in the recirculated PEIR Section 3.1.5, the County has included reduction measures that would apply to the Proposed Project as part of a County-owned facility. Furthermore, CARB's Cap-and-Trade program is intended for stationary industrial uses, such as industrial production of cement, glass, iron, steel, paper, etc., fuel production, and energy production. This is not applicable to the Airport or Proposed Project. No changes have been made to the PEIR in response to this comment.

R-I24-28 As explained in the recirculated PEIR Section 3.1.5, the Proposed Project would result in less than significant impacts, and no mitigation is required. Also, because the Airport is a County-owned facility, the Proposed Project would be subject to the reduction measures identified in the County's Climate Action Plan (CAP), which were identified and included in the recirculated PEIR Section 3.1.5, Table 3.1.5-12. The comment further requests an explanation regarding land use and zoning responsibilities, which were not the subject of the recirculated PEIR sections. Therefore, no changes have been made to the PEIR in response to this comment, and no further response is required.

R-I24-29 As explained in **Response to Comment R-I24-25**, CEQA Guidelines Section 15064.4 gives each lead agency the affirmative duty to develop its own GHG methodologies and thresholds for each regardless of project type. Accordingly, in its independent evaluation,

the County determined the revised thresholds in the recirculated PEIR Section 3.1.5 meet the state's reduction requirements, and is supported by substantial evidence. The threshold is based on long-range targets identified by the state to achieve its reduction goals. Specifically, the threshold is based on CARB's communitywide recommendation for 2030 of six metric tons of CO₂ equivalent gases (6 MT CO₂e) per person. To determine the threshold, the 2030 population is required to calculate the total emissions for San Diego County. The population data for 2030 was taken from SANDAG, which is the regional agency with expertise in demographics as they are responsible for developing the regional housing needs assessment for each local jurisdiction, as well as the Regional Transportation Plan and Sustainable Communities Strategy. Both CARB and SANDAG have used evidence-based methods for determining these key points. Using the 2030 Countywide target, it was extrapolated to 2036 (i.e., full implementation of the Master Plan Update). The projection was conducted based on CARB's recommendation of an approximately 5.2 percent reduction per year in emissions to achieve CARB's 2050 target. These calculations represent the state's best understanding of future conditions and what is required to achieve the long-range goals of the Global Solutions Act of 2006. Furthermore, the mathematical formula shown on page 3-69 of the recirculated PEIR Section 3.1.5 demonstrates the County did consider all project-related emissions (including aircraft) that would occur as a result of PAL 1 and PAL 2 forecasts. Therefore, the Proposed Project would not impede the state's GHG reduction or target goals. No changes have been made to the PEIR in response to this comment.

Regarding the analysis of other County airports, this topic was previously raised by the commenter and addressed in **Response to Comment R-I24-20**. No changes have been made to the PEIR in response to this comment.

R-I24-30 Regarding the commenter's proposal to implement operational constraints of aircraft using the runway/taxiway facilities, this topic was previously raised by the commenter and addressed in **Response to Comment R-I24-23**.

R-I24-31 Regarding the analysis of other County airports, this topic was previously raised by the commenter and addressed in **Response to Comment R-I24-20**. No changes have been made to the PEIR in response to this comment.

Regarding the commenter's proposal to implement operational constraints of aircraft using the runway/taxiway facilities, this topic was previously raised by the commenter and addressed in **Response to Comment R-I24-23**. For a discussion of why the County cannot restrict aircraft, please also see **Master Response 7**. Lastly, **Master Response 3** discusses the existing Voluntary Noise Abatement Procedures (VNAP). No changes have been made to the PEIR in response to this comment.

R-I24-32 The Proposed Project includes installation of Engineered Materials Arresting System (EMAS) at both ends of the runway. The comment asks why construction-related GHG emissions associated with the western end would result in higher emissions than the eastern end as reflected in the PEIR Table 3.1.5-3. While the size of the EMAS on both ends would be similar, the EMAS located on the runway's east end would be installed on the existing relatively flat surface with only 6 weeks assumed for total construction. Whereas the EMAS proposed on the west end of the runway could require up to 10 months for construction. Due to a change in topography on the runway's west end, fill material would be placed to provide for sufficient surface area, and a retaining wall would be engineered to support the new surface area for the EMAS to be installed. Therefore, the construction equipment, duration, and types of activities are anticipated to require a higher level of effort than compared to the EMAS proposed on the runway's east end. These assumptions and quantifications were disclosed in the same document as

referenced by the commenter (PEIR, Appendix H [Climate Change Technical Report, Appendix A]). Therefore, no changes have been made to the PEIR in response to this comment.

R-I24-33 As noted by the comment, Phase 7 of the Master Plan Update (200-foot runway/taxiway extension) would include bore rigs to install drill displacement columns. The comment states that Phase 12 (600-foot runway/taxiway extension) would be expected to result in 28.5 times higher GHG emissions than Phase 7 due to the total runway length. However, because the 600-foot extension is an estimated three times longer than the 200-foot extension, GHG emissions would be assumed to be three times greater. When combined with the total construction emissions and amortized over the 20-year planning period as explained in the recirculated PEIR Section 3.1.5, construction-related GHG emissions are still anticipated to remain below the CAPCOA-defined 900 MT CO₂e screening level. Furthermore, the Master Plan Update is a long-term planning document, and the exact scope, scale, and timing for implementation of each proposed element are not yet defined because project-specific information has not been fully developed to quantify exact impacts. Therefore, environmental impacts for each element, and the Master Plan Update as a whole, are analyzed at a programmatic level for the purpose of environmental analysis. Additional analysis under CEQA will be required for projects at the time that they are designed and proposed. Regarding estimated project costs, please refer to Table 5.1 of the Master Plan Update. The comment also requests information pertaining to construction vehicle emissions specifically associated with removing hazardous material encountered during installation of the runway/taxiway extension over the inactive landfill. While the County has calculated estimated construction emissions to the extent feasible, project-specific elements have not been fully defined, scoped, or designed. Therefore, for the purposes of the PEIR, environmental impacts are analyzed at a programmatic level with the understanding and disclosure that additional analysis pursuant to CEQA will be required as project-specific elements are funded, designed, and proposed.

R-I24-34 As explained in **Response to Comment R-I24-21**, traffic-related GHG emissions were analyzed only for activities attributable to the Proposed Project, which includes commercial airline service, because the project contributes to an increase in commercial service, but does not cause an increase in general aviation. Therefore, the PEIR Tables 3.1.5-8 and 3.1.5-9 identify the quantified GHG emissions associated with PAL 1 and PAL 2, respectively, for full implementation of the Master Plan Update in 2036. Nonetheless, Table 3.1.5-5 discloses the anticipated GHG emissions that would result without the Proposed Project (i.e., No Project Alternative).

The comment also includes a request for information related to existing, ongoing environmental conditions of the onsite inactive landfill (i.e., methane). The County Department of Public Works, Landfill Management Division, currently maintains a gas collection control system associated with the inactive landfill, and this system would continue to function during construction and in future conditions. Please refer to the previously disclosed PEIR Table 3.1.5-1 for a quantification of GHG emissions under existing conditions. In accordance with CEQA, the PEIR quantified GHG emissions attributable to the Proposed Project. No changes have been made to the PEIR in response to this comment.

R-I24-35 The comment requests project-specific information of potential methane emissions that could occur over the inactive landfill during construction of various project elements. Please refer to the County's response to **Response to Comments I75-47** and **R-I24-34**. Coordination is anticipated to occur with the appropriate regulatory agencies, including the state Local Enforcement Agency (LEA) and San Diego County Air Pollution Control

District (SDAPCD). The Master Plan Update is a long-term planning document, and the exact scope, scale, and timing for implementation of each proposed element are not yet defined because project-specific information has not been fully developed to quantify exact impacts. Therefore, environmental impacts for each element, and the Master Plan Update as a whole, are analyzed at a programmatic level for the purpose of environmental analysis. Additional analysis under CEQA will be required for projects at the time that they are designed and proposed. While the County has calculated estimated construction emissions to the extent feasible, additional analysis pursuant to CEQA will be required as project-specific elements are funded, designed, and proposed. No changes have been made to the PEIR in response to this comment, and no further response is required.

R-I24-36 The comment includes a request for engineering design analysis of aircraft utilizing the runway. Please refer to **Master Response 10**. No changes have been made to the PEIR, and no further response is required.

R-I24-37 Please refer to **Response to Comment R-I24-34**. Furthermore, the comment does not raise an issue concerning the analysis or adequacy of the PEIR pursuant to CEQA Guidelines Section 15088. No changes have been made to the PEIR, and no further response is required.

R-I24-38 Please refer to **Master Response 10** and **Response to Comment R-I24-32**. This comment also includes a request for information asking the County to explain construction-related methane emissions; however, the comment does not specifically identify an environmental issue with the PEIR analysis or proposed mitigation. Therefore, no changes to the PEIR have been made in response to this comment, and no further response is required.

R-I24-39 The comment asks the County to explain the GHG emissions tables and calculations that were published in the recirculated PEIR Section 3.1.5, and to identify whether or not they included non-commercial aircraft operations. The following includes a description of the published emissions data.

Table 3.1.5-8 (PAL 1) and Table 3.1.5-9 (PAL 2) identify all GHG emissions that would occur by 2036 with natural growth and implementation of the Proposed Project. This includes all aircraft operations (including both commercial and non-commercial). Table 3.1.5-10 was prepared to easily compare these projected GHG emissions associated with PAL 1 and PAL 2 against the significance threshold. Table 3.1.5-10 shows that emissions would be below the threshold. Table 3.1.5-11 takes it one step further and combines the GHG emissions associated with PAL 1 and PAL 2 with all construction-related GHG emissions. As shown, emissions would be below the threshold.

Nonetheless, it should be clarified that the County has no discretion or enforcement authority over non-commercial aviation activity (such as general aviation, military, or charter flights). As explained in the PEIR, aircraft operations at the Airport would naturally continue to increase overtime regardless of the Proposed Project (i.e., commercial airline activity and capital improvements associated with the Master Plan Update). Therefore, for comparison, the County prepared Table 3.1.5-5, which identifies the GHG emissions that would naturally occur in 2036 without the Proposed Project. Table 3.1.5-6 shows the difference in 2036 with and without the Proposed Project. This methodology is consistent with the FAA Office of Environment and Energy, which requires the study of an implementation year with and without a proposed action to account for incremental changes that may occur in environmental conditions.

Therefore, as discussed above, non-commercial aviation activity was analyzed, and its potential emissions were fully disclosed in the PEIR and technical studies. The PEIR did analyze aircraft activity that is within the County's discretion (i.e., commercial operations) as well as activity that is not within the County's discretion (i.e., non-commercial operations). No changes to the PEIR have been made in response to this comment, and no further response is required.

- R-I24-40** Regarding traffic-related GHG emissions, this topic was previously raised by the commenter and addressed in **Response to Comment R-I24-21**. No changes to the PEIR have been made in response to this comment, and no further response is required.
- R-I24-41** Regarding traffic-related GHG emissions and ongoing environmental conditions of the onsite inactive landfill (i.e., methane), these topics were previously raised by the commenter and addressed in **Response to Comment R-I24-34**. No changes to the PEIR have been made in response to this comment, and no further response is required.
- R-I24-42** Regarding construction-related GHG emissions associated with the inactive landfill, this topic was previously raised by the commenter and addressed in **Response to Comment R-I24-35**. No changes to the PEIR have been made in response to this comment, and no further response is required.
- R-I24-43** The comment provides a citation back to an earlier statement by the commenter associated with the GHG service population. Please refer to **Response to Comments R-I24-29 through I24-31** for that discussion.

Next, the comment states that the Proposed Project would result in GHG emissions levels by 230 percent and 330 percent, presumably associated with PAL 1 and PAL 2, respectively. The County disagrees with these numbers. Please refer to **Response to Comment R-I24-39** for an explanation of GHG emissions tables that were previously published in the recirculated PEIR Section 3.1.5.

The comment also asks the County to evaluate a scenario posed by the commenter in which there is *“added idling of FAA-rated C and D aircraft concurrently operating.”* It would be inappropriate to speculate potential operational conditions at the Airport (i.e., which size aircraft would be idling at the Airport at the same time). Rather, the PEIR was prepared at a programmatic level to analyze the forecasted number of aircraft operations that are anticipated to occur throughout the Master Plan Update's 20-year planning period. Furthermore, please refer to **Master Response 7**, which describes the roles of the FAA, pilots, and the County. No changes to the PEIR have been made in response to this comment.

- R-I24-44** The County disagrees with the comment that PEIR Table 3.1.5-12 identifies mitigation measures. As discussed in the PEIR, the Proposed Project would result in less than significant impacts from GHG emissions and, accordingly, no mitigation is required. Rather, Table 3.1.5-12 identifies “reduction” measures as identified in the County's Climate Action Plan (CAP) for County-owned that will be implemented system-wide for public projects, including improvements at the Airport. Table 3.1.5-12 summarizes County-initiated measures identified in the CAP Chapter 3 (Strategies and Measures) applicable to the Master Plan Update improvements. As individual project elements are proposed throughout the Airport Master Plan Update's 20-year planning period, each project would incorporate these measures to contribute to meeting the County's emissions reduction targets. No changes to the PEIR have been made in response to this comment.

- R-I24-45** The comment asks the County to clarify certain construction-related GHG emissions calculations. The Master Plan Update is a long-term planning document, and the exact scope, scale, and timing for implementation of each proposed element are not yet defined because project-specific information has not been fully developed to quantify exact impacts. Therefore, environmental impacts for each element, and the Master Plan Update as a whole, are analyzed at a programmatic level for the purpose of environmental analysis. Additional analysis under CEQA will be required for projects at the time that they are designed and proposed.
- R-I24-46** The comment includes remarks regarding project-specific design elements of the Master Plan Update (including runway extension and retaining walls), and the comment requests the County to justify and explain these elements as presented by the commenter. The comment does not raise an issue concerning the analysis or adequacy of the PEIR pursuant to CEQA Guidelines Section 15088. No changes to the PEIR have been made in response to this comment, and no further response is required.
- R-I24-47** The comment includes introductory remarks seeking clarification of the PEIR Section 3.1.10 (Energy Use and Conservation), including users of the Airport, and potential vehicle trips generated by various activities. The comment then includes discussion of ongoing, existing conditions. As noted in **Master Response 6**, a lead agency is not required to analyze impacts of existing conditions, nor is that within the scope of the Proposed Project. Rather, the PEIR was prepared to analyze potential environmental effects associated with the proposed activities identified in the Master Plan Update through 2036. The comment does not raise an issue concerning the analysis or adequacy of the PEIR pursuant to CEQA Guidelines Section 15088. No changes to the PEIR have been made in response to this comment.
- R-I24-48** The comment cites Reduction Measure 3.5 from PEIR Table 3.1.5-12 regarding installation of electric vehicle charging stations. The comment includes a request for information regarding power plants not related to the Airport or Proposed Project. As this comment includes a request for information, it does not specifically identify an environmental issue with the PEIR analysis or proposed mitigation. Therefore, no changes to the PEIR have been made in response to this comment, and no further response is required.
- R-I24-49** This comment includes financial estimates regarding the Master Plan Update improvements. The comment does not raise an issue concerning the analysis or adequacy of the PEIR pursuant to CEQA Guidelines Section 15088. No changes to the PEIR have been made in response to this comment.
- R-I24-50** The comment requests the County to justify and explain the proposed runway extension and EMAS located on the runway's west end. The comment does not raise an issue concerning the analysis or adequacy of the PEIR pursuant to CEQA Guidelines Section 15088. No changes to the PEIR have been made in response to this comment, and no further response is required.
- R-I24-51** This comment requests project-specific construction information related to the runway extension, including the number of holes that would be drilled through the inactive landfill, depth of holes, estimated duration to drill holes, etc. As noted in the PEIR, the conceptual construction strategy of displacement column piles is preliminary, and project-specific engineering design plans have not been developed. As described in the PEIR, the Master Plan Update is a long-term planning document, and the exact scope, scale, and timing for implementation of each proposed element are not yet defined because project-specific information has not been fully developed to quantify exact impacts. Therefore,

environmental impacts for each element, and the Master Plan Update as a whole, are analyzed at a programmatic level for the purpose of environmental analysis. Also, please refer to **Master Response 10** regarding project-level and program-level environmental review. No changes to the PEIR were made in response to this comment, and no further response is required.

- R-I24-52** The comment asks the County to explain why the PEIR Section 3.1.10 (Energy Use and Conservation) cites that 535,471 gallons of aviation fuel are consumed annually when the County's published Fuel Flowage report for 2018 first quarter shows a different quantity. The comment also includes excerpts from the PEIR Section 3.1.10 and the County's published 2018 first quarter fuel usage from the Airport's website.

First, the 2018 data published on the County website identifies the quantity of aviation fuel that was *delivered* to the Airport, but it does not identify how or when that fuel would be used. In contrast, the PEIR specifically identifies the quantity of fuel used by aircraft. Second, for the purposes of calculating air quality and GHG emissions produced by aircraft, the FAA-approved Aviation Environmental Design Tool (AEDT) was used, which calculated fuel usage based on the Proposed Project's aircraft operations forecast and fleet mix. In other words, as a function of the AEDT model, the County quantified the estimated fuel usage by identifying the number of aircraft operations and fleet mix projected through 2036. Therefore, the data is based on substantial evidence and is sufficient for the PEIR analysis. Third, the aircraft fleet mix using the Airport in 2018 is projected to change overtime through 2036 as documented in the Master Plan Update. As discussed in the recirculated PEIR Section 3.1.5, the FAA is continuously working to improve aviation energy efficiency, including its Continuous Lower Energy, Emissions, and Noise (CLEEN) Program. Therefore, it is anticipated that aircraft fuel efficiency would continue to improve, and it is reasonable that aircraft utilizing the Airport in 2036 at the Master Plan Update's full implementation may consume less fuel than aircraft today in 2018.

Therefore, the County finds that the PEIR analysis is correct and does not require revision. The recirculated PEIR Section 3.1.10 contains sufficient quantifications of energy usage, and no changes to the PEIR have been made in response to this comment.

- R-I24-53** This comment includes calculations of fuel usage provided by the commenter, and the comment asks the County to address these calculations. However, the County is not required to refute each commenter's assumptions and claims. Rather, the County is required to demonstrate with substantial evidence that the County properly analyzed potential environmental impacts of the Proposed Project using the most appropriate and applicable information. As such, the calculations reflected in PEIR Section 3.1.10 and Appendix J are valid as the fuel calculations are based on the most current version of the California Emissions Estimator Model (CalEEMod) and FAA's Aviation Environmental Design Tool (AEDT). No changes have been made to the PEIR.

- R-I24-54** The County has simplified all RPZ exhibits and figures to extent possible. Where approach and departure RPZs overlap each other, only the larger is shown, thus depicting the maximum impact for that particular scenario while reducing the number of lines on the exhibit.

In the final Master Plan Update, the County has also included a table outlining all the criteria for both the approach and departure RPZ size and location (i.e., airport design group, runway approach and departure ends, visibility minimums associated with those minimums, and FAA design dimensions for each RPZ). With this information in addition

to the diagrams, the reader will be provided all the necessary data that determines the size, shape, and location of an RPZ. Upon a decision of a selected alternative by the County Board of Supervisors, County staff will initiate revisions to the Airport Layout Plan (ALP) in consultation with the FAA.

- R-I24-55** Each of the drawings identified has the yellow cross-hatched areas identified on the drawing legend. There is no need to recirculate the drawings since they already show what is being requested by the commenter.
- R-I24-56** The comment includes an excerpt from FAA Advisory Circular 150/5300-13A. It is provided by the commenter associated with **Comment R-I24-54**. No response is required.
- R-I24-57** In the final Master Plan Update and PEIR, the County will include both approach and departure RPZs and will also provide with each set of RPZ drawings a table outlining all the elements that go into determining an RPZs size and location (i.e., airport design group, runway approach and departure ends, visibility minimums associated with those minimums, and FAA design dimensions for each RPZ). With this information in addition to the diagrams, the reader will be provided all the necessary data that determines the size, shape and location of an RPZ.
- R-I24-58** The County has made all recirculated RPZ exhibits and figures as simple as possible; where approach and departure RPZs overlap each other, only the larger is shown, thus depicting the maximum impact for that particular scenario while reducing the number of lines on the exhibit.

All previous comments to the PEIR have been reviewed and all responses will be included in the Final PEIR as required under CEQA. Recirculation of County's responses is not required.

The Master Plan Update and PEIR include multiple alternatives. The County Board of Supervisors will consider and select from the alternatives included in the Master Plan Update and PEIR.

- R-I24-59** This comment includes an excerpt from the previously circulated PEIR Section 2.4 (Hazards and Hazardous Materials) related to Runway Protection Zones (RPZs). Although this section was not one of the subjects recirculated for public review, the comment states that the Airport Land Use Commission (ALUC) has the authority to require the County to obtain ALUC review of the Master Plan Update. As explained in the PEIR, the County acknowledges that alterations to Runway 06-24 and other applicable facilities would require an update to the Airport's ALUCP for changes in noise contours, safety zones, and/or land use type or density policies within the ALUC jurisdiction for the Airport. However, the Master Plan Update and PEIR include multiple alternatives, and the County Board of Supervisors will consider and select from these alternatives. Upon a final decision by the County Board of Supervisors, the County would coordinate with the ALUC (i.e., San Diego County Regional Airport Authority) on the necessary revisions to the ALUCP. No changes have been made to the PEIR in response to this comment.
- R-I24-60** The comments request the Final PEIR to identify how the Master Plan Update would affect the ALUC noise and safety zones. Please refer to **Response to Comment R-I24-59**. The information requested by the commenter is outside of the scope of the PEIR. As explained in the PEIR, it is the ALUC's responsibility to revise the ALUCP upon selection of a project alternative by the County Board of Supervisors. Subsequently, the County would coordinate with the ALUC (i.e., San Diego County Regional Airport Authority) on

the necessary revisions to the ALUCP. No changes have been made to the PEIR in response to this comment.

R-I24-61 The County disagrees that project-specific information, such as EMAS on the runway's western end must be depicted on PEIR Figure 1-5. Figure 1-5 is intended to only depict the Airport's RPZs. As an element of the Proposed Project, EMAS proposed on the runway's western end was analyzed in the PEIR. No changes have been made to the PEIR in response to this comment.

R-I24-62 The County disagrees that the retaining wall is associated with the size and orientation of the RPZs. The RPZs are dictated based on the airport design category, visibility minimums, and location of the runway end or the landing threshold on the runway. No changes have been made to the PEIR in response to this comment.

R-I24-63 PEIR Figure 1-5 has been revised to include the MALSR on the Eastern Parcel; however, it is presented for information purposes only as the MALSR itself does not dictate RPZ size or orientation. No other changes have been made to the PEIR, and no further response is required.

R-I24-64 The recirculated PEIR Figure 4-1a (B-II Enhanced Alternative) does include a legend that identifies the meaning of the yellow line. The legend defines the yellow line as the "Airport Property Line." No changes have been made to the PEIR in response to this comment.

R-I24-65 The comment requests the County to revise Figure 4-1a to cite a maximum runway extension of 800 feet. The County disagrees with this comment, and Figure 4-1a correctly cites that the B-II Enhanced Alternative could include a runway extension of up to 900 feet. This is further discussed in the PEIR Section 4.3.2. No changes have been made to the PEIR in response to this comment.

The comment also requests the PEIR be revised to analyze the environmental impacts of a 900-foot runway extension. This analysis is included in the PEIR Section 4.3.2. No changes have been made to the PEIR in response to this comment.

R-I24-66 This comment includes remarks regarding the engineering design for the B-II Enhanced Alternative. Under CEQA, the PEIR analysis is not required to justify and explain the proposed design, but rather it is required to analyze potential environmental impacts of improvements proposed by the Master Plan Update. Nonetheless, for a B-II design standard, 300 feet is required for a Runway Safety Area (RSA) prior to the threshold, not 1,000 feet as the comment suggests. Furthermore, the comment concludes by requesting information pertaining to a theoretical aircraft collision and justification for the proposed runway width. The comment does not specifically identify an environmental issue with the PEIR analysis. Therefore, no changes have been made to the PEIR, and no further response is required.

R-I24-67 Please see **Response to Comment R-I24-54** above.

R-I24-68 Please see **Response to Comment R-I24-54** above.

R-I24-69 Please see **Response to Comment R-I24-54** above.

R-I24-70 Please see **Response to Comment R-I24-54** above.

R-I24-71 Please see **Response to Comment R-I24-54** above.

- R-I24-72** Please see **Response to Comment R-I24-54** above.
- R-I24-73** Please see **Response to Comment R-I24-54** above.
- R-I24-74** Please see **Response to Comment R-I24-54** above.
- R-I24-75** Please see **Response to Comment R-I24-54** above.
- R-I24-76** Please see **Response to Comment R-I24-54** above.
- R-I24-77** Please see **Response to Comment R-I24-54** above.
- R-I24-78** This comment includes remarks regarding the engineering design for the C-III Modified Standards Compliance Alternative. Under CEQA, the PEIR analysis is not required to justify and explain the proposed design, but rather it is required to analyze potential environmental impacts of improvements proposed by the Master Plan Update. The comment does not raise an issue concerning the analysis or adequacy of the PEIR pursuant to CEQA Guidelines Section 15088. No changes to the PEIR have been made in response to this comment, and no further response is required.
- R-I24-79** Please see **Response to Comment R-I24-78** above.
- R-I24-80** Please see **Response to Comment R-I24-60** above.
- R-I24-81** Please see **Response to Comment R-I24-60** above.
- R-I24-82** Please see **Response to Comment R-I24-60** above.
- R-I24-83** Please see **Response to Comment R-I24-60** above.
- R-I24-84** The comment requests the County to justify and explain the proposed EMAS shown on PEIR Figure 4-5b. The comment does not raise an issue concerning the analysis or adequacy of the PEIR pursuant to CEQA Guidelines Section 15088. No changes to the PEIR have been made in response to this comment, and no further response is required.
- R-I24-85** Please see **Response to Comment R-I24-54** above.
- R-I24-86** This comment includes an excerpted image of Table 4-1 from the PEIR. Please refer to **Response to Comment R-I24-58** where the table is cited. No changes to the PEIR have been made in response to this comment, and no further response is required.
- R-I24-87** This comment includes remarks regarding the Public Comment Alternative included in the PEIR. The County acknowledges receipt of this comment; however, it does not cite specific environmental issues with the PEIR analysis or proposed mitigation. No changes to the PEIR have been made, and no further response is required. This comment is included in the Final PEIR for review and consideration by the County Board of Supervisors prior to a final decision on the project.
- R-I24-88** Please see **Response to Comment R-I24-54** above.
- R-I24-89** Please see **Response to Comment R-I24-54** above.
- R-I24-90** Please see **Response to Comment R-I24-54** above.
- R-I24-91** Please see **Response to Comment R-I24-54** above.

R-I24-92 Please see **Response to Comment R-I24-54** above.

R-I24-93 This comment includes introductory remarks for the commenter's attachment (included in the record as an "exhibit"). No response is required.

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